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February 23, 2012

Office of Pollution Prevention and Toxics
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U.S. Environmental Protection Agency
1201 Constitution Ave., NW
EPA East Room 6428
Washington, DC 20004
Attention: 8(e) Coordinator

8 E H Q - 1 2 - 1 8 5 6 2

**RE: Notification of Substantial Risk** 

Dear Sir or Madam:

In accordance with Section 8(e) of the Toxic Substances Control Act (TSCA), Rhodia Inc. (Rhodia) is submitting the following information:

"In vivo COMET ASSAY IN THE RAT STUDY PERFORMED ON STOMACH and DUODENUM with the compound CATECHOL (Two treatments, one sampling time)"

In this study, the genotoxic potential of catechol (CAS# 120-80-9) was investigated in the *in vivo* comet assay performed under alkaline conditions, i.e. pH > 13 (Alkaline Single Cell Gel Electrophoresis) in the OFA Sprague Dawley male rat, stomach and duodenum, after two treatments by oral route at 3 dose levels (the maximum tolerated dose, MTD, 50% and 25% MTD), followed by one expression time of 3 to 6 hours after the last treatment.

In this assay, rats are treated two times at a 24-hour interval with the test compound at different dose levels. Three to six hours after the second treatment, the rats are killed and cells from the selected target organs are isolated. After isolation, single cells are embedded in agarose on microscope slides and successively submitted to lysis, unwinding and electrophoresis in alkaline conditions. After neutralization, slides are dried and stained with a fluorescent dye before analysis and scoring. The method used for quantifying DNA migration involves a computerized image analysis system in order to collect comet data; then, software calculates the metrics for DNA migration per the Olive Tail Moment (OTM), corresponding to the product of the tail length and the percentage of tail DNA.

In the initial study to determine the MTD, two groups of 4 male rats were dosed orally twice at 800 and 400 mg/kg/day. In the 800 mg/kg/day dose, very strong clonic convulsions occurred in all four male rats, 15 min to 30 min after the first treatment. For ethical reasons, the animals were euthanized and no second treatment was performed. The dose level of 400 mg/kg/day induced no death or clinical signs in the four male rats after the 1st or the 2nd treatment.

To determine if 400 mg/kg/day was the MTD, another group of 4 rats were treated at 500 mg/kg/day. The first treatment at the dose level of 500 mg/kg/day induced strong clonic convulsions in the four male rats, 15 min to 30 min after the first treatment. Three animals out of 4 died and for ethical reasons, the 4th animal was euthanized and no second treatment was performed. 400 mg/kg/day was confirmed as the MTD.

In the comet assay, five (5) male Sprague Dawley rats were treated orally with catechol at levels of 100, 200 and 400 mg/kg/day. No statistically significant <u>increase</u> in the OTM medians was observed in rat stomach cells treated with catechol at levels up to 400 mg/kg/day. The median OTM for 600 cells was 0.81, 0.35 and 1.13 at 400, 200 and 100 mg/kg/day, respectively, vs. 2.26 in the negative control group.

Under these experimental conditions, catechol induced no statistically significant increases in DNA strand breaks at non-lethal dose on rat stomach cells after oral administration.

Statistically significant increases in the OTM medians were observed in duodenum cells from rats, treated with the doses of 200 and 100 mg/kg/day of catechol. The median OTM for 600 cells (from the 4 animals analyzed per group) was 3.38 and 4.64 at doses of 200 and 100 mg/kg/day, respectively, vs. 1.48 in the negative control group. At these two dose-levels of 200 and 100 mg/kg/day, two animals out of the four treated, presented particularly strong increases in the median OTM, with values up to 6.07 and 4.21 at 200 mg/kg/day and 9.73 and 7.29 at 100 mg/kg/day. However, the dose of 400 mg/kg/day did not induce a statistically significant increase in the median OTM, with a value of 1.28. This value was below that of the OTM median for the control group. In fact the results showed a statistically significant increase in the median OTM, but with an inverse dose-effect relation, and a bell-shaped curve response. The test item was thus considered by the laboratory to be genotoxic to the rat duodenum cells.

Also in the comet assay, the laboratory reported that very strong clonic convulsions were observed 5 minutes after oral administration of catechol at the dose of 400 mg/kg/day, leading to one death between 30 minutes and 2 hours after the 1st treatment. Furthermore, the 4 animals were trembling after the 2nd treatment at 400 mg/kg/day. No clinical signs were reported in the animals treated with doses of 200 and 100 mg/kg/day.

Rhodia does not believe that the subject substance presents an unreasonable risk to workers, the public, or the environment when catechol is properly manufactured and used for its intended applications, but Rhodia believes that the submitted information may meet EPA's reporting criteria for TSCA Section 8(e).

This study was communicated to Rhodia Inc. on January 25, 2012.

Rhodia asserts that none of the information contained within this notice constitutes confidential business information (CBI) under TSCA.

Should you have any questions, or require further information, please do not hesitate to contact me at (215) 369-9734. Thank you.

Very truly yours, RHODIA INC.

Judith L. Kranetz

Director, Regulatory Compliance & Product Stewardship

JLK/ Atts

Ref: 12-009L 8(e).doc Via Federal Express



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## FINAL STUDY REPORT CONFIDENTIAL

STUDY TITLE

In vivo COMET ASSAY IN THE RAT

STUDY PERFORMED ON STOMACH and DUODENUM with the compound CATECHOL

(Two treatments, one sampling time)

STUDY DIRECTOR

Dr. Fabrice NESSLANY

R DE LILLE - Genetic Toxicology Labor

INSTITUT PASTEUR DE LILLE - Genetic Toxicology Laboratory
1, rue du Professeur Calmette - BP. 245
59019 LILLE CEDEX

FINAL STUDY REPORT DATE
December 2<sup>nd</sup> 2008

STUDY NUMBER

FSR-IPL 070402 / CATECHOL / RHODIA SGS MULTILAB phase number: BPL07-0029

STUDY PERFORMED BY

INSTITUT PASTEUR DE LILLE

1, rue du Professeur Calmette - BP. 245

59019 LILLE CEDEX

TEST SITES

SGS MULTILAB

Technopôle du Madrillet

65, Rue Ettore Bugatti

BP 90014

76801 Saint Etienne du Rouvray cedex

PRINCIPAL INVESTIGATORS

Mr. Gregory Bouillis

SPONSOR

RHODIA

190, avenue Thiers 69457 LYON cedex 06

SPONSOR REPRESENTATIVE

Mr. Cyrille BOCQUILLOD

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#### STUDY INFORMATION

TITLE OF THE STUDY

In vivo COMET ASSAY IN THE RAT STUDY PERFORMED ON STOMACH

and DUODENUM (Two treatments, one sampling time)

**SPONSOR** 

RHODIA

**TEST ITEM** 

CATECHOL

#### I. TESTING FACILITY INFORMATION:

Test facility

Institut Pasteur de Lille

Test facility address

Genetic Toxicology Laboratory

1, rue du Professeur Calmette - B.P. 245

59019 LILLE CEDEX France

Study director

Dr. Fabrice NESSLANY

Deputy Study director

Dr. Sophie SIMAR

Lead quality assurance

Mrs. B. GOREZ

Test facility management

Professor D. MARZIN

Head of Toxicology Department

II. SPONSOR INFORMATION:

Sponsor

RHODIA

Sponsor's address

190, avenue Thiers 69457 LYON cedex 06

Sponsor representative

Mr. Cyrille BOCQUILLOD

#### III. ANALYTICAL TEST SITE INFORMATION:

1. ANALYTICAL TEST SITE FOR BIONANALYSIS

OF DOSING FORMULATIONS

SGS MULTILAB

Analytical Test site address

Technopôle du Madrillet 65, Rue Ettore Bugatti

BP 90014

76801 Saint Etienne du Rouvray

Study Phase Number

BPL07-0029 (cf Amendment No. 3, Appendix No. 20)

Report Issued

January 14th, 2008

Principal investigator

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2. ANALYTICAL TEST SITE FOR BIONANALYSIS

OF PLASMA

Not performed

## GOOD LABORATORY PRACTICE COMPLIANCE STATEMENT AND REPORT AUTHENTICATION

The work described in this report was performed according to the agreed study plan and with the Standard Operating Procedures (SOP) of the testing facility, unless otherwise stated, and was conducted in accordance with:

- OECD Principles of Good Laboratory Practice (as revised in 1997), ENV/MC/CHEM(98)17;
- GLP Decree No. 98.1312 (Official Journal of 31st December 1998);
- GLP departmental order 14/3/2000 (Official Journal of 23<sup>rd</sup> March 2000);
- GLP departmental order 28/1/2005 (Official Journal of 20<sup>th</sup> February 2005);
- Application of the OECD Principles of GLP to the Organisation and Management of Multi-Site Studies, No. 13 Consensus Document of the Working Group on Good Laboratory Practice, ENV/JM/MONO(2002)9;
- EC Commission Directive 2004/10/EC of 11<sup>th</sup> February 2004 (Official Journal No. L050).

I consider the data generated and reported to be valid and I declare that this report is a true and accurate record of the results obtained.

As described on page 21 of the study plan FSP-IPL 070402, the sponsor certifies that the test item to be tested provided by RHODIA is identical to the test item described in the study plan and in the Analytical certificate.

Concerning the information about the test compound, data about its stability in the vehicle were available; however, the Catechol stability study was not performed under GLP status and did not covered the actual period of preservation (i.e. period between the preparation/collection process and the dosage). This constitutes a deviation to the recommendations of the Good Laboratory Practice (OECD 1997; §6.2, Characterization). Nevertheless, dosages showed that the differences between the nominal and the actual concentrations of the test item in the administered dosage forms were in an acceptable range of ± 5% demonstrating an acceptable stability of Catechol in the vehicle used under the conditions of preservation. Therefore, this deviation was considered as a minor deviation, which has no impact on the quality and/or the integrity of the current study.

The study was performed at the Toxicology Department of Institut Pasteur de Lille.

Submitted by:

Study director

Dr. Fabrice NESSLANY\*

e \_\_\_\_\_

Authorization of experimentation on animals \* No. 59-35068
Agreement of the establishment for realizing experiments on living vertebrate animals No. A59-35009

#### FSR-IPL 070402 / CATECHOL / RHODIA

STUDY

: In vivo COMET ASSAY IN THE RAT STUDY PERFORMED ON STOMACH

and DUODENUM (Two treatments, one sampling time)

**TEST ITEM** 

: CATECHOL

**SPONSOR** 

: RHODIA

This report was reviewed and approved by:

Test facility management

Professor D. MARZIN \*

Head of Toxicology Department

2711/08

**Deputy Study director** 

Dr. Sophie SIMAR\*\*

Assistant

all or

Date

Signatures

Authorization of experimentation on animals No. \* 59-35001, No. \*\* 59-350156

Agreement of the establishment for realizing experiments on living vertebrate animals No. A59-35009

#### **QUALITY ASSURANCE STATEMENT**

TITLE OF THE STUDY

In vivo COMET ASSAY IN THE RAT STUDY PERFORMED ON

STOMACH and DUODENUM (Two treatments, one sampling time)

**TEST ITEM** 

CATECHOL

**SPONSOR** 

RHODIA

STUDY LOCATION

INSTITUT PASTEUR DE LILLE

Genetic Toxicology Laboratory

1, rue du Professeur Calmette - B.P. 245

59019 LILLE CEDEX

This study was inspected by the Quality Assurance Unit, employing methods detailed in Standard Operating Procedures used at the Toxicology Department of Institut Pasteur de Lille. The analytical phases of the study (control of concentration in dosing formulations) were audited by SGS MULTILAB. These data are presented in the final report. The data presented in the report accurately reflect data collected during the conduct of the study. Any data supplied by or under the responsibility of the Sponsor were not subjected to review.

Dates of inspection, phases inspected, and reporting dates are as follows:

, ,,	Inspection		ures on this	inspection of procedures associated with this type of study		
	Inspection/ Audit	Study director report	Test facility Management report	Inspection/ Audit	Study director report	Test facility Management report
Receipt-acclimatization of animals	29/05/07	29/05/07	01/06/07			
Treatment of animals	25/09/07	25/09/07	03/10/07			
Toxicity	29/05/07	29/05/07	01/06/07			
Isolation of stomach cells				27/06/07	27/06/07	09/07/07
Isolation of duodenum cells				27/06/07	27/06/07	09/07/07
Comet assay	27/09/07	01/10/07	03/10/07			
Preparation of treatment solutions	25/09/07	25/09/07	03/10/07			
Reading of slides				26/07/07	26/07/07	20/08/07

	Inspection/Audit - Q.A. Report
Study Plan No. FSP-IPL 070402 - accepted by the study director on 28/05/07 - accepted by the sponsor representative on 06/06/07	28/05/07
Amendment No. 1 - accepted by the study director on 30/08/07 - accepted by the sponsor representative on 08/09/07	29/08/07
Amendment No. 2 - accepted by the study director on 28/08/08 - accepted by the sponsor representative on 3/09/08	20/08/08
Amendment No. 3 - accepted by the study director on 2/09/08 - accepted by the sponsor representative on 11/09/08	2/09/08
Amendment No. 4 - accepted by the study director on 10/10/08 - accepted by the sponsor representative on 15/10/08	10/10/08
Draft report	31/10/07
Final report	271M108

**Quality Assurance Unit** 

Mrs Brigitte GOREZ

#### **ARCHIVE STATEMENT**

The following study materials are retained in the archives of the Toxicology Laboratory of the Institut Pasteur de Lille (1, rue du Pr Calmette – 59019 Lille – France) for at least 10 years after the end of the study:

- > Study plan and possible amendments,
- > Raw data or authenticated copies thereof,
- > Correspondence,
- > Final report and possible amendments.

According to OECD Guideline Number 7 (as revised in 1997) point II 6.2.6 relative to the application of the Good Laboratory Practice Principles to short-term studies, at the sponsor's request and as mentioned in the Study Plan FSP-IPL 070402, the test article is destroyed at the end of the study.

In addition, raw data not specific to the study, including but not limited to certificates of analysis for food, water and sawdust and records of environmental data and equipments calibration are also archived at Institut Pasteur de Lille for at least 20 years.

Documents referring to the GLP study and study phase at the test site **SGS MULTILAB** (copy of study plan and subsequent amendments, satellite study design, final satellite report and raw data, etc.), are archived at the test site for 10 years. On completion of this period, with the approbation of the Sponsor, all archived documents referring to the Study Phase are destroyed or returned to the Sponsor.

## In vivo COMET ASSAY IN THE RAT STUDY PERFORMED ON THE ON STOMACH and DUODENUM (Two treatments, one sampling time)

#### SUMMARY

SPONSOR

: RHODIA

TEST ITEM BATCH NUMBER : CATECHOL : FPC0619301

STUDY LOCATION

: INSTITUT PASTEUR DE LILLE

Genetic Toxicology Laboratory

1, rue du Professeur Calmette - B.P. 245

59019 LILLE CEDEX

## THIS STUDY WAS CARRIED OUT IN COMPLIANCE WITH GOOD LABORATORY PRACTICE REGULATIONS

#### **METHOD**

Animals (species, sex, strain)

: OFA Sprague Dawley male rats

Number of animals per group

: 4

Form administered

solution

Vehicle

: distilled water

Route

oral

Dose volume

10 mL/kg

Doses tested in the preliminary

toxicity test

800 - 500 - 400 mg/kg/ day (x 2)

Maximum tolerated dose

400 mg/kg/ day (x 2)

Organs studied

stomach and duodenum

Treatment schedule

two treatments, one sampling time

Number of expression times

1 at 3 to 6 hours after the last treatment

Doses used in the comet assay :

400 - 200 - 100 mg/kg/ day (x 2)

(analyzed doses appear in bold)

Reference substances

dimethylhydrazine, 20 mg/kg (x1) for duodenum

N-Methyl N'-nitro-N-nitrosoguanidine (MNNG), 20 mg/kg (x1) for stomach

Number of cells observed

per animal

150

Number of cells observed

: 600

per dose

(450 for the positive control)

#### **RESULTS**

#### TOXICITY ASSAY

DOSES in mg/kg/day (x2)	DOSING VOLUME	NUMBER OF ANIMALS	% MORTALITY 24 HOURS AFTER FIRST TREATMENT	% MORTALITY 24 HOURS AFTER SECOND TREATMENT
800*	10 ml /kg	4	100	-
400**	10 mL/kg	4	0	0

<sup>\*: 4</sup> animals presented clonic convulsions after the 1 st treatment. Animals were euthanasied after 30 min.
\*\*: Neither mortality nor strong clinical signs were noted

DOSES in mg/kg/day (x2)	DOSING VOLUME	NUMBER OF ANIMALS	% MORTALITY 24 HOURS AFTER FIRST TREATMENT	% MORTALITY 24 HOURS AFTER SECOND TREATMENT
500*	10 mL/kg	4	75	-

<sup>\*: 3</sup> animals with strong clonic convulsions and 3 dead after 25 min after the 1 st treatment

The maximum tolerated dose of CATECHOL under these experimental conditions was set at 400 mg/kg/day (x2) by oral route in OFA Sprague Dawley male rats. The doses of 800 and 500 mg/kg elicited strong clinical signs, as described above.

#### **GENOTOXICITY ASSAY / STOMACH CELLS**

	In vivo	COMET ASSAY	IN ISOL	ated rats	TOMACH	CELLS							
GROUP	COMPOUND	DOSES in mg/kg/day (x2)	OTM	OTM F of Snedecor (homogeneity of variances)		RAMETRIC l evaluation	Relative ratio						
			iviedian		p Kruskall- Wallis	p Mann-Whitney	of ghost cells						
Solvent control	Distilled water	0	2.26	p<0.0001 p									-
	Catéchol	400	0.81		<0.0001 p<0.0001	p<0.0001	0.54						
TREATED		200	0.35		p 10.0001	p 10.0001	p<0.0001	0.59					
		100	1.13			p<0.0001	0.96						
Positive control	MNNG	20 mg/kg/day (x1)	5.37	-	-	p<0.0001	0.95						

No statistically significant increase in the OTM medians was observed in rat stomach cells treated with the three doses of Catéchol, i.e. 400 - 200 and 100 mg/kg/day (x2). Under these conditions, Catéchol was not considered as a DNA strand breaks and/or alkali-labile sites inducer on stomach cells.

<sup>4</sup>th animal euthanasied

#### GENOTOXICITY ASSAY / DUODENUM CELLS

G.	in vivo (	ASEA (BRO)	N 1513H	ATEB RATIO		CELLA			
GROUP	COMPOUND DOSES in mg/kg/day (x2)	DOSES in	ОТМ	F of Snedecor	NON PARAMETRIC statistical evaluation		Relative ratio of ghost cells		
OKOSI		Median	(homogeneity of variances)	p Kruskall- Wallis	p Mann-Whitney				
Solvent control	Distilled water	0	1.48						-
		400	1.28	p<0.0001	p<0.0001	N.S.	0.79		
TREATED	Catéchol	200	3.38			p<0.0001	0.94		
		100	100 4.64		p<0.0001	1.10			
Positive control	Dimethylhydr azine	20 mg/kg/day (x1)	8.94	-	-	p<0.0001	0.87		

Statistically significant increases in the <u>OTM medians</u> were observed in rat duodenum cells treated with the doses of 200 and 100 mg/kg/day (x2) of **Catéchol**. A clear inverse dose-effect relationship was noted. In return, the dose of 400 mg/kg/day (x2) did not induce any statistically significant increase in the median OTM.

It is noteworthy that the highest median OTM was observed at the lowest dose tested of 100 mg/kg/day (x2). The decrease in the values of median OTM at the two upper doses of 400 and 200 mg/kg/day (x2), compared to the dose of 100 mg/kg/day (x2), is most probably related to toxicity of the test item **Catéchol**, consistent with the clinical signs at the highest dose of 400 mg/kg/day (x2) described above. For the dose of 200 mg/kg/day (x2), the clinical signs did not indicate any toxic effect that could explain the decrease in the OTM value. In conclusion, the highest dose without genotoxic effect under the lowest dose tested of 100 mg/kg/day (x2), could not be determined in this study.

#### **CONCLUSION**

The test item CATECHOL (batch FPC0619301) provided by RHODIA was investigated by the means of the *in vivo* comet assay on stomach and duodenum, under alkaline conditions (SCGE) in the male OFA Sprague Dawley rats treated orally twice with 400, 200 and 100 mg/kg/day, with one sampling time 3 to 6 hours after the last treatment. Following the results of the toxicity assay, the maximum tolerated dose (MTD) determined was of 400 mg/kg/day. This dose was retained as the maximum dose to be tested, as well as two lower doses corresponding to MTD/2 and MTD/4. These two doses were not toxic, indeed, no clinical signs were observed.

Under these experimental conditions, CATECHOL induced no statistically significant increases in DNA strand breaks at non-lethal dose on rat *stomach* cells after oral administration. CATECHOL is hence devoid of genotoxic activity on the *stomach*.

In return, CATECHOL induced statistically significant increases in DNA strand breaks at non-lethal doses on rat *duodenum* cells after oral administration, with the highest increase of median OTM at the lowest dose tested of 100 mg/kg/day (x2). Furthermore, the very low cell density observed at the two highest doses tested during image analysis, indicates a probable cell lysis due to cytotoxicity and /or highly damaged cells with loss of information. Regarding the criteria described in paragraph 9, a test item is found to demonstrate genotoxic properties against the target organ if it results in a statistically significant increase in the OTM median compared with the negative control group and if the genotoxicity detected shows a dose-effect relationship. In fact the results showed a statistically significant increase in the median OTM, but with an inverse dose-effect relation, with a bell-shaped curve response. The test item Catechol was thus considered as genotoxic on rat duodenum cells.

It would be useful to implement a complementary assay under the same experimental conditions on duodenum cells only, but using doses lower than 100 mg/kg/day (x2), in order to determine if there is a high dose without genotoxic effect under the dose level of 100 mg/kg/day (x2). Under these conditions, CATECHOL was considered as a DNA strand breaks and/or alkali-labile sites inducer on duodenum cells.

A satisfactory agreement was observed between the actual and nominal concentrations of CATECHOL in treatment solutions used in the *in vivo* comet assay performed on stomach and duodenum. Indeed, the deviations from nominal concentrations were within an acceptable range of ±10%.

#### In vivo COMET ASSAY IN THE RAT STUDY PERFORMED ON STOMACH and DUODENUM (two treatments, one sampling time)

#### A. GENERAL STUDY PLAN

The single cell gel electrophoresis (SCGE) assay, also known as the "Comet assay", is a rapid, simple, visual and sensitive technique for measuring and analysing DNA breakage in mammalian cells (Östling and Johanson, 1984; Singh *et al.*, 1988; Olive *et al.*, 1990).

#### 1. PURPOSE OF THE STUDY

The purpose of the *in vivo* Comet assay following the alkaline version (pH > 13) developed by Singh *et al.* (1988), is to identify those agents, which induce DNA damage such as single or double DNA strand breaks (SSB or DSB), alkali-labile sites, DNA-DNA / DNA-protein cross-linking and SSB associated with incomplete excision repair sites. The advantages of the Comet assay include its demonstrated sensitivity for detecting low levels of DNA damage.

The purpose of this study is to assess the genotoxic activity of the test compound in one or several target organs under these experimental conditions.

#### 2. PRINCIPLE

Rats are treated two times at a 24-hour interval with the test compound at different dose levels. Three to six hours after the second treatment, the rats are killed and cells from the selected target organ(s) are isolated using specific enzymatic treatment schedules. After isolation, single cells are embedded in agarose on microscope slides and the obtained microgels are successively submitted to lysis, unwinding and electrophoresis in alkaline conditions and under dimmed light to prevent any additional DNA damage. After neutralization, slides are dried and could therefore be stained with a fluorescent dye (e.g. propidium iodide) before analysis and scoring. The method used for quantifying DNA migration involves a computerized image analysis system in order to collect comet data; then, the dedicated sofware allows indeed the calculation of metrics for DNA migration as the one introduced by Olive et al. (1990), i.e. the Olive Tail Moment (OTM), corresponding to the product of the tail length and the percentage of tail DNA. Although at present, there is no OECD guideline for this assay, this study plan is in agreement with recent international recommendations. Several workshop reports or reviews defined the optimal conditions to implement the comet assay in the state of the art (Tice et al., 2000; Hartmann et al., 2004; Burlinson et al., 2007).

#### 3. CHOICE OF REACTIVE SYSTEM

Male rats are commonly used in this test and are recommended in workshop reports or reviews.

#### 4. ANIMALS AND HUSBANDRY

Young adult male OFA Sprague-Dawley rats (Charles River France origin, Saint-Germain-sur-l'Arbresle; FRANCE) weighing approximately 200 g and 5 to 10 weeks old, are used for the study. The period of acclimatization is at least 5 days. The animals receive a clinical examination in order to retain only the healthy ones.

At the start of the study, the weight variation of animals should be minimal and not exceed  $\pm$  20 % of the mean weight.

The animals are not fasted at the treatment time.

The animals are housed in polypropylene cages measuring  $42.5 \times 26.6 \times 15$  cm, covered by a stainless steel netted lid, in which they are placed in groups of 3 or 2 by random-distribution. The animals are identified by numbered ear rings.

The cages are placed in a ventilated cupboard slightly overpressurized relative to the animal room that is also ventilated.

The bedding consists of dust-free, sterilized wood shavings.

The feedstuff used is No. A04C10 irradiated rat/mouse feed from SAFE.

Drinking water softened, treated by osmosis and filtered on 0.2 µm membrane is provided ad libitum.

The temperature in the ventilated animal cupboard is 22 ± 3 °C, and humidity is 55 ± 15 %.

Ventilation renews the air 20 times per hour. A timer provides lighting 12 hours a day (8 a.m. - 8 p.m.) in all the animal rooms.

#### 5. PRELIMINARY TOXICITY TEST AND CHOICE OF DOSES

This test is performed in order to determine the maximum tolerated dose (MTD) that is chosen as the highest dose in the *in vivo* Comet assay.

The maximum tolerated dose (MTD) is described as the highest dose which causes no mortality, but which may give rise to the appearance of weak signs of toxicity. However, if a substance causes excessive signs of toxicity (for example: lethargy) suggesting that the animal's metabolism may be disturbed, a lower dose, chosen according to the symptoms, is administered.

In an effort to reduce the number of laboratory animals required, the toxicity test is performed according to the improved experimental design recommended by Fielder et al. (1992), using a large series of doses chosen in accordance with available toxicological data.

In the preliminary toxicity assay, 4 male rats per dose are used. Following dosing, the animals are observed regularly for a period of at least 48 hours and any clinical signs and/or any mortalities are recorded. The results are given in the form of tables.

The highest dose used for the *in vivo* Comet assay is the MTD. The lower doses should be 50% to 25% of the highest dose (MTD/2 and MTD/4).

For non-toxic products, the maximum dose of 2 g/kg or the maximum dose that can be administered practically to the animals, whichever is lower, will be chosen as the test highest dose.

#### 6. MATERIAL AND METHOD

#### 6.1 Formulation of the test compound

Solid substances are dissolved or suspended in appropriate solvents or vehicles and then diluted with the same solvent or vehicle if necessary. In case of suspensions only, a suspension for each dose is prepared individually. Liquid substances are dosed directly or diluted prior to dosing. Preparations for treatment are performed just before use.

#### Dose levels

From the results of the preliminary toxicity test, two dose levels are chosen for each genotoxicity assay.

An additional and provisional low dose level group is also incorporated into the experimental design. It would be assessed for DNA fragmentation in the *in vivo* Comet assay in the case of excessively low cell yields or mortality occurring at the highest dose or in order to establish either a dose-effect relationship or to find a no genotoxic effect dose.

#### 6.2 Dosing of animals

Healthy animals are randomly assigned to the control and treatment groups. Four animals are used in the negative and treated groups and three for the positive control groups. The test compound is administered using two treatments at a 24-hour interval by gavage with the standard dose volume of 10 mL/kg. More than the required minimum of 4 animals are treated at each experimental point (5) to allow for possible mortality or problems encountered during cell isolation step. Other routes of exposure may be acceptable when justified. In the current study, the oral route and administration by gavage is the most appropriate in order to caracterise the genotoxic activity of **catechol** in the stomach and the forestomach and in particular to demonstrate whether or not catechol is a direct genotoxic.

Negative controls are animals treated with vehicle in the same condition as treated animals (same route and vehicle).

Positive control animals are usually treated by oral route using a single treatment.

#### 6.3 Expression times (Sampling times)

One expression time between 3 to 6 hours after the second treatment is performed for the *in vivo* Comet assay. At the end of the expression time, animals are sacrificed and the cells of the target organs are isolated.

The repartition of treatment groups is summarized in the following Table:

Group	Treatment	Dosage	Number of animals used*		
		100000	3-6 hours after the 2 <sup>nd</sup> treatment		
1	Vehicle		4 (5)		
2	Test compound	Additional low dose**(MTD/4)	4 (5)		
3	Test compound	mid dose (MTD/2)	4 (5)		
4	Test compound	high dose (MTD)	4 (5)		
5	Dimethylhydrazine (duodenum)	10 mg/kg	3 (4)		
6	MNNG (stomach)	20 mg/kg	3 (4)		

<sup>\*</sup> Number of animals used in the test: the numbers indicate the number of animals used for cell isolation and, in brackets, the number of animals actually treated for the test.

These positive controls have been chosen because they have as target organ the stomach (MNNG) and the duodenum (DMH) and are known as specific carcinogens in these organs.

#### 6.4 Cell isolation(s)

The 5 animals of each group are assigned for cell isolation, but only 4 randomly animals are actually assessed for DNA fragmentation (the 5<sup>th</sup> animal could be assessed in the case of discrepant or equivocal results).

Individual animals are anaesthetized with pentobarbital (60 mg/kg) and maintained under deep anaesthesia to prevent any likelihood of recovery.

<sup>\*\*</sup> Group 2: an additional and provisional low dose level group which would only be assessed for the DNA fragmentation in the *in vivo* Comet assay in the event of unacceptably low cell yields or mortalities occurring in group 4, or in order to establish either a dose-effect relationship or to find a no genotoxic effect dose.

#### 6.4.1 Stomach

The abdominal surface of the animal is rinsed with 70% (v/v) ethanol and a 'V' shaped incision is made from the centre of the lower abdomen to the rib cage. The skin and muscles are removed to reveal the abdominal cavity. The stomach is removed, opened and rinsed with calcium- and magnesium-free phosphate buffer saline (PBS). The forestomach is discarded and the cells of gastric mucosa are isolated by enzymatic digestion following Burlinson *et al.* (1989) and Brault *et al.* (1999) as described hereafter:

The gastric mucosa is incubated in calcium- and magnesium-free Hank's balanced salt solution (HBSS) containing 50 U/mL protease at 37 °C for 30 minutes in the oven. After the first incubation period, the mucosa is then flushed with the incubation medium to remove cells. The cell suspensions are centrifuged at 350 g for 5 minutes. The cell pellets are resuspended in HBSS containing 0.25 % dispase II and the suspensions are incubated at 37 °C for 15 minutes in a hot-bath.

After the second incubation period, 0.5 mL of fetal calf serum is added and the cell suspensions are filtered through a 150 µm nylon filter. The cell suspensions are then centrifuged at 350 g for 5 minutes and the cells are resuspended in HBSS.

The proportion of viable cells is determined with the help of a Malassez haemocytometer using Trypan blue technique as described in 6.6 before preparing slides to be assessed for DNA fragmentation (see paragraph 6.7: Comet assay).

#### 6.4.2 Duodenum

The abdominal surface of the animal is rinsed with 70% (v/v) ethanol and a 'V' shaped incision is made from the centre of the lower abdomen to the rib cage. The skin and muscles are removed to reveal the abdominal cavity. The totality of the duodenum is removed and rinsed with calcium- and magnesium-free phosphate buffer saline (PBS). Cells of duodenum are isolated by enzymatic digestion following Evans *et al.* (1992) as described hereafter.

Firstly, a ligature is tightened at one end of each duodenum sample. Then, a mix of collagenase XI and dispase I (300 U/ml, 0.02 %) is directly injected into the sample of duodenum using a syringe and a second ligature is placed on the other end of the sample of duodenum. The sample of duodenum filled with the enzymatic mix is then incubated for 30 minutes at 37 °C in a hot-bath, in 10 mL of HBSS. After the incubation period, around 0.2 mL of fetal calf serum is added. The sample of duodenum is then opened and carefully scrapped in order to facilitate the cell dissociation. After that, the cell suspension is centrifuged 5 minutes at 150 g. The cell pellets are resuspended in HBSS.

The proportion of viable cells is determined with the help of a Malassez haemocytometer using Trypan blue technique as described in 6.6 before preparing slides to be assessed for DNA fragmentation (see paragraph 6.7: Comet assay).

#### 6.5 Determination of the cytotoxicity of the compound

Cytotoxicity is determined on a small sample of each isolated cell suspension following the Trypan blue vital dye exclusion technique.

In accordance with a recognized group of scientists, the decrease in the viability should not be more than 30 % when compared to the concurrent control (Tice et al., 2000). Cell viability in the target tissue that is below 70 % of that in the control animals may thus be considered excessive.

Therefore, according to the data obtained from the cytotoxicity assessment, doses are actually selected for genotoxicity assessment (two dose levels are chosen for each structured organ).

At least  $1.2 \times 10^5$  viable cells are required for proceeding to slides preparation (4 slides with  $3 \times 10^4$  viable cells per slide) as described in 6.7.

#### 6.6 Preparation of specific reagents for comet assay

#### 6.6.1 Lysis stock solution (pH 10)

The composition of the lysis stock solution is the following:

- NaCl 2.5 mM
- EDTA 100 mM
- Trizma Base 10 mM
- NaOH 12 g/L

The final lysis solution contains 89 % of lysis stock solution, 10 % of DMSO and 1 % of Triton X-100.

#### 6.6.2 Electrophoresis buffer

The final electrophoresis buffer contains 30 mL of NaOH 10 N solution, 5 mL of EDTA 200 mM (pH = 10) solution and 965 mL of distilled water.

#### 6.6.3 Neutralization buffer

The neutralisation buffer contains Trizma Base 400 mM (pH = 7.5).

#### 6.6.4 Staining stock solution

The staining stock solution contains 1 mg/ml of Propidium iodide in distilled water.

Just prior to use, the staining stock solution is 1/10<sup>th</sup> diluted in water to obtain the final staining solution.

#### 6.7 Comet assay

The Comet assay is performed under alkaline conditions essentially following the procedure of Singh *et al.* (1988). At least three slides are prepared for each animal, with 4 animals per group, *i.e.* at least 12 slides per type of treatment (negative and positive control and two dose levels). Fifty cells per slide are randomly scored, *i.e.* 150 cells per animal.

The essential steps of comet assay are successively, layering of cells mixed with low melting point agarose (over coated glass microscope slides), lysis (to lyse the cell and nuclear membranes and other proteins), unwinding of DNA, electrophoresis, neutralization, staining and scoring.

#### 6.7.1 Dried slides preparation (pre-layering)

Conventional slides are dipped in a 1.5 % normal melting point agarose in PBS while it is hot. After gently remove, underside of slides is wiped in order to remove excess agarose. The slides are then laid in a tray on a flat surface to dry.

#### 6.7.2 Slide preparation

Before use, a volume of  $85 \,\mu$ I of 0.8% of Normal Agarose (NA) is added on microscope slide pre-layered with 1.5% of NA (as described above in 6.8.1) and cover with a glass coverslip. Slides are placed on a slide tray resting on the ice packs until the agarose layer hardens (3 to 5 minutes). Around  $3 \times 10^4$  cells of the different concentrations tested are mixed with  $75 \,\mu$ I of 0.5% of Low Melting Point Agarose (LMPA) kept at  $37 \,^{\circ}$ C and added on microscope slide after gentle slide off the coverslip. They are then covered with a new glass coverslip. Slides are placed on a slide tray on ice packs for 3 to 5 minutes.

#### 6.7.3 Lysis

After the top layer of agarose has solidified, the glass coverslips are removed and the slides are immersed for at least 1 hour at + 4 °C in the dark in a lysing solution consisting of 2.5 M NaCl, 100 mM EDTA, 10 mM Tris, pH 10, to which 1% Triton X-100 and 10% DMSO are freshly added (pH adjusted to 10 with NaOH).

#### 6.7.4 Unwinding, electrophoresis and staining

The slides are then removed and placed on a horizontal gel electrophoresis unit and the unit filled with freshly prepared alkaline buffer (1 mM EDTA and 300 mM NaOH, pH > 13) to around 0.25 cm above the slides. In order to avoid excessive variation across the groups during each electrophoretic run, for each animal only one of the quadriplicate slides is processed in each run (DNA – unwinding and electrophoresis). The cells are exposed to the alkali for 20 minutes to allow the DNA unwinding, and expression of single-strand breaks and alkali-labile sites. Next, electrophoresis is conducted for 20 minutes at 0-4°C by applying an electric current of 0.7 V / cm (25 V / 300 mA). All these steps are conducted sheltered from the daylight to prevent the occurrence of additional DNA damage. After electrophoresis at pH >13, the slides are neutralized twice for 5 minutes with 0.4 M tris (pH 7.5) and the DNA is exposed for 5 minutes to absolute ethanol in order to preserve all the comet assay slides [34]. Subsequently, the slides are airdried and then stored at room temperature until they are scored for DNA migration.

Just prior to scoring, the DNA is stained using Propidium Iodide (20 µg/mL distilled water; 30 µL/slide),

#### 6.7.5 Image analysis

Slides are examined at 250 x magnification using a fluorescent microscope (Leica Microscopy and Scientific Instruments Group, Heerbrugg, Switzerland) equipped with an excitation filter of 515-560 nm and a barrier filter of 590 nm, connected through a gated CCD camera to Comet Image Analysis System, version 4.0 software (Kinetic Imaging Ltd, Liverpool, UK).

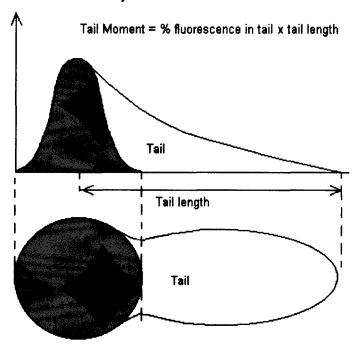
At least three slides are prepared for each animal, with 4 animals per group, *i.e.* at least 12 slides per type of treatment (negative and positive control and two dose levels). Fifty cells per slide are randomly scored, *i.e.* 150 cells per animal.

#### 6.7.6 Tail parameters

Olive Tail Moment (OTM) preconised by Olive (1993) is used to evaluate DNA damage. The OTM, expressed in arbitrary units, is calculated by multiplying the percentage of DNA (fluorescence) in the tail by the length of the tail in µm (B. Hellman *et al.*, 1995; E. Rojas *et al.*, 1999). The tail length is measured between the edge of comet head and the end of the comet tail.

A major advantage of using the OTM as an index of DNA damage is that both the amount of damaged DNA and the distance of migration of the genetic material in the tail are represented by a single number (J. Ashby et al., 1995).

#### Fluorescence Intensity



Tail Moment calculation following Olive

#### 7. EXPRESSION OF THE RESULTS AND STATISTICAL ANALYSIS

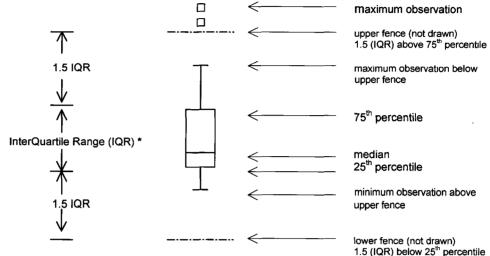
#### 7.1 Expression of the results

At least three slides are prepared for each animal with 4 animals per group, *i.e.* at least 12 slides per type of treatment (negative and positive control and two dose levels). Fifty cells per slide are randomly scored, *i.e.* 150 cells per animal.

The results obtained in the different treatments are presented in tabular form giving the OTM median for at least 150 cells per animal.

In addition, each slide was also examined for presence of ghost cells (possible indicator of toxicity and or apoptosis). Ghost cells are excluded from image analysis data collection. However, determining their frequency might be useful for data interpretation. Therefore, the percentage of ghost cells is recorded for each slide per animal, per type of treatment and per organ. The ghost cells, also known as clouds or hedgehogs, are morphological indicative of highly damaged cells often associated with severe genotoxicity, necrosis and apoptosis. A ghost cells results from a total migration of the DNA from the nucleus into the comet tail, reducing the size of the head to a minimum.

□ For each assay, a box plot on Olive Tail Moment over group is realized in order to show the distribution per slide per animal as described above:



<sup>\*:</sup> Range of observations between 25th and 75th percentiles

□ According to the 4th International Workshop on Genotoxicity Testing (Burlinson et al., 2007) as Tail Moment is used, Tail length and %Tail DNA data will be presented under tabular form.

#### 7.2 Statistical analysis

In order to quantify the test item effects on DNA, the following statistical analysis strategy is applied, using the statistical software **Stat view**, version 5.

Before analyzing the OTM median of the treated groups, the absence of statistically significant differences between group variances is verified. The group variances are compared (OTM of total group without positive control) using the **F of Snedecor** (F- test) at the 0.05 significance level.

#### 7.2.1 Homogeneity of variance: Statistical analysis using parametric tests

- □ When differences between group variances are not found to be significant, a parametric, one-way analysis of variance ANOVA is performed. Linear regression analysis is used to determine *dose-response relationships*.
- □ Pair-wise comparisons t-test are used to compare each of the doses tested with the vehicle control, to determine if a particular dose shows a difference with respect to vehicle control. Pair-wise comparisons t-test is also used to compare vehicle control and positive control to determine acceptable criteria of a valid test.

#### 7.2.2 Non-homogeneity of variance: Statistical analysis using non-parametric tests

- □ When differences between group variances are found to be significant, the OTM frequencies and other tail parameters do not follow a gaussian distribution (E. Bauer et al., 1998). The non-parametric, one-way Kruskal-Wallis test is then performed. This method is based on the analysis of variance by ranks for testing equality of population medians among groups, in order to display a possible dose-response relationships.
- □ The non-parametric Mann-Whitney U-test is applied to compare each of the doses tested with the vehicle control in order to determine statistical significance of differences in group median values between each group versus the vehicle control. This test is also used to compare vehicle control and positive control to determine acceptable criteria of a valid test.

#### 8. ACCEPTANCE CRITERIA FOR THE RESULTS

A study is accepted if both following criteria are fulfilled:

- In the solvent control group, the OTM median must be lower than 8.
- In the positive control groups, the OTM median must be statistically increased compared to the control group.

#### 9. INTERPRETATION OF THE RESULTS

A test item is found to demonstrate genotoxic properties against the target organ if it results in a statistically significant increase in the OTM median compared with the negative control group and if the genotoxicity detected shows a dose-effect relationship.

However, statistically significant increases with values inside the limits of negative historical control data are considered as non-biologically relevant.

A test item is found to have no genotoxic effect on the target organ if it does not comply with any of the criteria listed above.

In case of significant increases in OTM median compared to vehicle control without a clear dose-relationship or no increase in any of the treated groups with evidence of a dose-response, the test item is considered as equivocal.

If neither situation occurs, the results are discussed case by case and another independent study may be implemented after modifying the dose range taking into account all available relevant data. Any complementary assay will be the subject of a new study plan.

The criteria are not absolute but do constitute an aid to decision, which will make it possible to reach a conclusion in most cases.

#### 10. CONTROL OF CONCENTRATION IN DOSING FORMULATIONS

The sponsor chose to check the concentration of CATECHOL in dosing formulations.

In that case, this study is a multi-site study as defined in the consensus document No.13 of OECD: the Application of the OECD Principles of GLP to the Organization and Management of Multi-Site Studies.

The test site Quality Assurance audited this part of the study and sent a copy of the audits to the test facility management, the study director and the lead Quality Assurance.

Deviations from the study plan or Standard Operating Procedures (SOPs) related to the study should be documented at the test site, be acknowledged by the Principal Investigator and reported to and acknowledged by the Study Director in a timely manner. The study director will assess the impact of each event on the quality and/or the integrity of the study.

For each part of the multi-site study, a phase study report is issued and sent to the Study Director. It includes the results, a Principal Investigator statement of compliance and a test site quality assurance statement.

The corresponding results are inserted in the Final Report in Appendix No. 22 and they may be discussed in the conclusion.

#### 10.1 Control of concentration in dosing formulations

The sponsor chooses to perform the check of the concentration of CATECHOL in dosing formulations.

Aliquots of **each dosing formulation** were sent to the laboratory in charge of analysis. For details, see paragraph C2 of the current report.

#### 11. STUDY PLAN ADHERENCE

The current study was carried out in compliance with the Final Study Plan FSP-IPL 070402 and amendments. At Sponsor's request, the 3<sup>rd</sup> dose of 100 mg/kg/day (x2) was also analyzed.

Slides were not examined with the Comet Image Analysis System as stated page 13 of the Final Study Plan, but with a 200 x magnification, using a fluorescent microscope (Leica Microsystems - DM 2000, Heerbrugg, Switzerland), equipped with an excitation filter of 515-560 nm and a barrier filter of 590 nm, connected through a gated monochrome CCD IEEE1394 FireWire video camera (Allied Vision Technologies), to Comet Assay IV Image Analysis System, version 4.11 with Windows XP Pro Software (Perceptive Instruments Ltd, Suffolk, UK).

No other deviation from the Final Study Plan was observed.

#### **B. GENERAL INFORMATION AND SPECIFIC PROTOCOL**

SPONSOR : In vivo COMET ASSAY IN THE RAT STUDY PERFORMED ON

STOMACH and DUODENUM (Two treatments, one sampling

time)

TEST ITEM : CATECHOL

I.P.L. REGISTRATION NUMBER : 060719

BATCH NUMBER : FPC0619301 EXPIRY DATE : 14-07-2008

APPEARANCE : beige to brown flakes
QUANTITY SUPPLIED : approximately 200 g

PURITY: 99.7%

STORAGE : at room temperature, away from light and air (may discolour)

STABILITY IN

STORAGE CONDITIONS : 14/07/2008

This test item, the characteristics of which are given in Appendix No. 13, was tested in accordance with

the Final Study Plan, with the following exceptions or particularities:

The test item presents a purity of 99.7%, a purity correction was made.

Animals : rat: OFA Sprague Dawley

sex: male only

weight: 156 g to 192 g

Feedstuff No. A04C10 irradiated : SAFE, Batch 61124

Form administered : solution
Vehicle : distilled water

Stability in vehicle : stable at -18°C during 2 months

Route : oral route
Dose volume : 10 mL/kg

Maximum tolerated dose : 400 mg/kg/day (x2)

Organs studied : stomach and duodenum

Treatment schedule : treated and control groups: two treatments with a 24-hour interval

positive control groups: one treatment

Number of expression times : 1: 3 to 6 hours after the last treatment

Doses used in the comet assay

(analyzed doses appear in bold) : 400 - 200 - 100 mg/kg/day (x2)

Reference substances : <u>STOMACH</u>: N-Methyl N'-nitro-N-nitrosoguanidine (MNNG)

(Aldrich, Batch 15427LO), oral route, 20 mg/kg (at 10 mL/kg)

DUODENUM: dimethylhydrazine (Fluka, Batch 419144/1 34800)

oral route, 20 mg/kg (at 10 mL/kg)

Number of cells observed/animal : 150 Number of cells observed/dose : 600

450 for positive control

- In-life phase:

Experimental starting / completion date : 28/05/07 - 22/10/07

#### C. RESULTS

The genotoxic potential of **CATECHOL** (batch FPC0619301) from **RHODIA** was investigated in the *in vivo* comet assay performed under alkaline conditions, *i.e.* pH > 13 (Alkaline Single Cell Gel Electrophoresis) in the OFA Sprague Dawley male rats, stomach and duodenum, after two treatments by oral route at 3 dose levels (the maximum tolerated dose, MTD, 50 and 25% MTD), followed by one expression time of 3 to 6 hours after the last treatment.

The current protocol is in agreement with recent international recommendations, several workshop reports or reviews which defined the optimal conditions to implement the comet assay in the state of the art (Tice et al., 2000; Hartmann et al., 2004; Burlinson et al. 2007).

#### 1. PREPARATION OF DOSING FORMULATIONS

In accordance with the Final Study Plan, the test **CATECHOL** was dissolved in distilled water up to a maximum concentration of 80 mg/mL (toxicity assay) or 40 mg/mL (genotoxicity assay) and administered at a dose volume of 10 mL/kg, giving final doses of 800 and 400 mg/kg, respectively. The different inferior dilutions were also performed with distilled water.

Regarding the positive reference substance, both MNNG and dimethylhydrazine were dissolved in distilled water and administered under a dose volume of 10 mL/kg by oral route.

#### 2. CONTROL OF CONCENTRATION IN DOSING FORMULATIONS

In agreement with the study plan FSP-IPL 070402, samples of **each dosing formulation (volume of 2 x 1 mL)** used in the main genotoxicity assay were stored frozen at  $-18 \pm 3$ °C, prior to dispatching on dry ice at the end of the study to the Principal Investigator in charge of control of concentration in treatment solutions:

Name, surname : Mr. Gregory BOUILLIS

Address : SGS MULTILAB

Technopôle du Madrillet 65, Rue Ettore Bugatti

BP 90014

76801 Saint Etienne du Rouvray

Results of **CATECHOL** concentrations in dosing formulations are presented in the final report, Appendix No. 22.

A satisfactory agreement was observed between the actual and nominal concentrations of **CATECHOL** in treatment solutions used in the in vivo comet assay performed on stomach and duodenum. Indeed, the deviations from nominal concentrations were within an acceptable range of ±10%. Furthermore, solutions of **CATECHOL** can be considered as stable at -18°C, during two months.

The second aliquots were kept in the same preserving conditions at Institut Pasteur de Lille. The back-up samples were not used and were thus destroyed at the finalization of the study report.

#### 3. TOXICITY TEST

Results of the toxicity test by the oral route in OFA Sprague Dawley male rats (preliminary and confirmatory assays) are summarized in Table 1.

In this toxicity assay, two groups of 4 male rats were dosed orally twice at 800 and 400 mg/kg/day. The maximum tolerated dose of **CATECHOL** was set at 400 mg/kg/day (x2) by oral route in OFA Sprague Dawley male rats. Indeed, the dose of 800 mg/kg/day (x2) elicited strong clinical signs, as described below and at the dose of 500 mg/kg/day (x2), 3 animals out of 4 died 25 min after the first treatment. In return, the dose of 400 mg/kg/day (x2) induced no clinical signs.

#### DOSE OF 400 MG/KG/DAY (X2)

The dose level of 400 mg/kg/day (x2) induced no death or clinical signs in the four male rats after the 1<sup>st</sup> or the 2<sup>nd</sup> treatment.

#### DOSE OF 800 MG/KG/DAY (X2)

The first treatment at the high dose level of 800 mg/kg/day (x2) induced very strong clonic convulsions in the four male rats, 15 min to 30 min after the first treatment. For ethical reasons, the animals were euthanasied and no second treatment was performed.

In order to confirm that the dose of 400 mg/kg/day (x2) is the actual maximum tolerated dose in OFA Sprague Dawley male rats, a 2<sup>nd</sup> toxicity assay with a third intermediary dose of 500 mg/kg/day (x2) was implemented.

#### DOSE OF 500 MG/KG/DAY (X2)

The first treatment at the dose level of 500 mg/kg/day (x2) induced strong clonic convulsions in the four male rats, 15 min to 30 min after the first treatment. Three animals out of 4 died and for ethical reasons, the 4<sup>th</sup> animal was euthanasied and no second treatment was performed.

Under these conditions, the dose of 400 mg/kg/day (x2) was retained as the maximum dose to be tested in the comet assay. Two inferior doses were also tested, i.e. 200 and 100 mg/kg/day (x2).

#### **TABLE 1**

## in vivo COMET ASSAY IN ISOLATED RAT DUODENUM CELLS TOXICITY ASSAY

SPONSOR:

RHODIA

Species RAT

TEST ITEM:

CATECHOL

Strain: OFA SPRAGUE DAWLEY

VEHICLE:

Distilled water

Sex: male

DOSING VOLUME:

10 mL/kg

Administration route: oral

ORGAN:

STOMACH

Number of groups: 3

DUODENUM

Number of animals: 4

#### **PRELIMINARY ASSAY**

#### **Dates of treatments**

1<sup>st</sup> treatment:

29/05/07

2<sup>nd</sup> treatment:

30/05/07

Observation dates:

29/05/07 to 31/05/07

	DOSES in mg/kg/day (x2)	DOSING VOLUME	NUMBER OF ANIMALS	% MORTALITY 24 HOURS AFTER FIRST TREATMENT	% MORTALITY 24 HOURS AFTER SECOND TREATMENT
	800*	10 ml /kg	4	100	-
ſ	400**	10 mL/kg	4	0	0

<sup>\*: 4</sup> animals presented clonic convulsions after the 1 st treatment. Animals were euthanasied after 30 min.

#### **CONFIRMATORY ASSAY**

#### **Dates of treatments**

1<sup>st</sup> treatment:

19/06/07

2<sup>nd</sup> treatment:

20/06/07

Observation dates:

19/06/07 to 21/06/07

DOSES in mg/kg/day (x2)	DOSING VOLUME	NUMBER OF ANIMALS	% MORTALITY 24 HOURS AFTER FIRST TREATMENT	% MORTALITY 24 HOURS AFTER SECOND TREATMENT	
500*	10 mL/kg	4	75	-	

<sup>\*: 3</sup> animals with strong clonic convulsions and 3 dead after 25 min after the 1 st treatment 4 th animal euthanasied

<sup>\*\*:</sup> Neither mortality nor strong clinical signs were noted

#### 4. IN VIVO COMET ASSAY

At least 5 male rats per dose were treated orally twice with 400, 200 and 100 mg/kg/day (x2) **CATECHOL** for the *in vivo* comet assay on stomach and duodenum. The 2 highest doses of 400 and 200 mg/kg/day (x2), giving acceptable cell viability using the Trypan blue vital dye exclusion technique, *i.e.* >70%, were analysed first (See Table 5 and 9, Appendix 1). At sponsor's request, the 3<sup>rd</sup> dose of 100 mg/kg/day (x2), also presenting a cell viability above 70%, was analyzed and the results presented in the Final report.

The test results are summarized in Tables 2 and 3 and in Figures 1 and 2. The tables of data of individual values for nuclei's OTM are presented in Appendix No. 7 for stomach and in Appendix No. 10 for duodenum. The individual results are summarized in Appendix No. 1 (Tables 5 to 8) for stomach cells and appendix No. 2 (Tables 9 to 12) for duodenum cells. The individual representation of distributions is presented in Appendix No. 3 for stomach and No. 5 for duodenum.

The Tables of data of individual values of OTM, Tail Length and % DNA in Tail are presented in Appendices 7, 8 and 9 for the stomach and 10, 11 and 12 for the duodenum.

The historical data for negative control and positive control were constituted with an assay after two treatments followed by one sampling time, 3 to 6 hours after the last treatment.

Significant increases in the mean OTM median values were noted in the groups treated with MNNG and dimethylhydrazine, demonstrating the sensitivity of the animal strain used to specific clastogenic agents on stomach and duodenum Thus, the validity criteria for the test were fulfilled and the test was valid.

The weight homogeneity of the animals used in this test after random-distribution was verified by comparing the weight mean of the treatment groups with that of the control group (Student t-test) (Table 4). There was no statistically significant difference between the weights of animals treated with the test item and those of control rats.

The results of the cellular viability determination upon the Trypan blue exclusion method are presented in Tables 5 and 9. The calculated relative viabilities for stomach and duodenum cells were superior to 70 %. However, it is to be noted that very strong clonic convulsions were observed 5 minutes after oral administration of **Catéchol** at the dose of 400 mg/kg/day (x2), leading to one death between 30 minutes and 2 hours after the 1<sup>st</sup> treatment. Furthermore, the 4 animals were trembling after the 2<sup>nd</sup> treatment at 400 mg/kg/day. The animals treated with the two inferior doses of 200 and 100 mg/kg/day elicited no clinical signs.

Furthermore, the observation of slides during image analysis of stomach and duodenum cells, showed a very low cell density at the two highest doses analysed of 400 and 200 mg/kg/day (x2). This low cell density indicates the presence of cell lysis that could not be identified with the Trypan blue vital dye exclusion technique nor with the measurement of ghost cells.

#### **GENOTOXICITY IN RAT STOMACH CELLS**

No statistically significant increase in the  $\underline{OTM}$  medians was observed in rat stomach cells treated with the three doses of **Catéchol**, *i.e.* 400 – 200 and 100 mg/kg/day (x2). Indeed, the values of median OTM for 600 cells were of 0.81 – 0.35 and 1.13 at 400 – 200 and 100 mg/kg/day (x2), respectively, vs. 2.26 in the negative control group (Tables 2 and 6). The OTM medians at the three tested doses were under the value of OTM median for the control group.

The F test (F of Snedecor) showed a statistically significant difference between group OTM variance (p<0.0001). Due to this non-homogeneity of variance between OTM groups, statistical analysis was performed using non-parametric tests.

<u>The non-parametric statistical assessment</u> allowed to display a significant dose-response relationship (Kruskall-Wallis, p<0.0001).

The pair wise analysis using Mann-Whitney showed statistically significant decreases in the median OTM of the three tested doses of 400-200 and 100 mg/kg/day (x2), vs. the negative control (Mann-Whitney, p<0.0001). Nevertheless, this decrease had no meaning in terms of genotoxicity.

Regarding the <u>percentages of ghost cells</u>, no increase compared to the negative control was observed (Table 8).

Under these conditions, Catéchol was not considered as a DNA strand breaks and/or alkali-labile sites inducer on stomach cells in the rat.

#### **GENOTOXICITY IN RAT DUODENUM CELLS**

Statistically significant increases in the <u>OTM medians</u> were observed in duodenum cells from rats, treated with the doses of 200 and 100 mg/kg/day (x2) of **Catéchol**. Indeed, the values of median OTM for 600 cells (4 animals tested per group) reached 3.38 and 4.64 at the two doses of 200 and 100 mg/kg/day (x2), respectively, vs. 1.48 in the negative control group (Tables 3 and 10). At these two dose-levels of 200 and 100 mg/kg/day (x2), two animals out of the four treated, presented particularly strong increases in the median OTM, with values reaching 6.07 and 4.21 at the dose of 200 mg/kg/day (x2) and 9.73 and 7.29 at the dose of 100 mg/kg/day (x2) (for 150 cells observed by animal, Table 10).

In return, the dose of 400 mg/kg/day (x2) did not induce a statistically significant increase in the median OTM, with a value of 1.28. This value was under the value of OTM median for the control group.

It is noteworthy that the highest median OTM was observed at the lowest dose tested of 100 mg/kg/day (x2). The decrease in the values of median OTM at the two upper doses of 400 and 200 mg/kg/day (x2), compared to the dose of 100 mg/kg/day (x2), is most probably related to toxicity of the test item **Catéchol**, consistent with the clinical signs described above, *i.e.* strong clonic convulsions were observed 5 minutes after oral administration of **Catéchol** at the dose of 400 mg/kg/day (x2), leading to one death between 30 minutes and 2 hours after the 1<sup>st</sup> treatment and the 4 animals were trembling after the 2<sup>nd</sup> treatment at 400 mg/kg/day. In return, no clinical signs were observed after the treatments at 200 and 100 mg/kg.

Furthermore, the cytotoxicity evaluated with the Trypan blue vital exclusion method and the measurement of the percentage of ghost cells during image analysis, did not permit to evaluate the potential cytotoxicity at the three doses tested (Tables 9 and 12).

The bell-shaped curve effect observed is considered as an indicator of the genotoxic activity of Catechol.

No dose without genotoxic effect could be determined at a concentration lower than 100 mg/kg/day (x2). Therefore, it would be useful to implement a complementary assay in order to investigate if **Catéchol** induces a genotoxic effect at doses lower than 100 mg/kg/day (x2) and to determine the highest dose under 100 mg/kg/day (x2) without genotoxic activity.

Regarding the statistical assessment, the <u>F test (F of Snedecor)</u> showed a statistically significant difference between group OTM variance (p<0.0001). Due to this non-homogeneity of variance between OTM groups, statistical analysis was performed using non-parametric tests.

<u>The non-parametric statistical assessment</u> allowed to display a significant dose-response relationship (Kruskall-Wallis, p<0.0001). It is noteworthy that this is a reverse dose-effect relationship, *i.e.* there is a decrease in the median OTM when increasing the doses of **Catechol**.

The pair wise analysis using Mann-Whitney showed statistically significant increases in the median OTM of the two tested doses of 200 and 100 mg/kg/day (x2), vs. the negative control. In return, the dose of 400 mg/kg/day (x2) did not induce a statistically significant increase in the median OTM.

Regarding the <u>percentages of ghost cells</u>, no increase compared to the negative control was observed (Table 12).

Under these conditions, Catechol was considered as a DNA strand breaks and/or alkali-labile sites inducer on duodenum cells in the rat.

#### HYPOTHESIS ON THE GENOTOXICITY OF CATECHOL

The results obtained in the in vivo comet assay on stomach in presence of CATECHOL, i.e.:

- no statistically significant increases in DNA strand breaks at non-lethal dose on rat stomach cells after oral administration.
- statistically significant <u>decreases</u> in the median OTM of the three tested doses and displaying a <u>significant reverse dose-response relationship</u>
- absence of signs of cytotoxicity at the three doses tested with the Trypan blue vital exclusion method
- no significant increase in the measurement of the percentage of ghost cells on the slides
- very <u>low cell density</u> observed during image analysis indicating a probable cell lysis due to cytotoxicity and /or highly damaged cells with loss of information

#### and in duodenum, i.e.:

- <u>statistically significant increases</u> in DNA strand breaks, with the highest increase of median OTM at the lowest dose tested, <u>decrease</u> in the values of median OTM at the <u>two upper doses</u> and no statistically significant increases at the highest dose tested
- displaying a significant <u>reverse dose-response relationship</u>, decrease in the median OTM when increasing the doses of **Catechol**, i.e. a bell-shaped curve response.
- absence of signs of cytotoxicity at the three doses tested with the Trypan blue vital exclusion method
- no significant increase in the measurement of the percentage of ghost cells on the slides
- very <u>low cell density</u> observed during image analysis indicating a probable cell lysis due to cytotoxicity and /or highly damaged cells with loss of information

lead to different hypothesis.

1/ The test item Catechol seems to induce excessive fragmentation of DNA. This extreme DNA fragmentation may be caused by:

- DNA strand breaks, single or double DNA strand breaks (SSB or DSB).
- Another possible mechanism could be DNA fragilization through the formation of alkali-labile sites. In such cases, the formation of apurinic or apyrimidic sites by excision of damaged bases by a DNAglycosylase, may alter and fragilize DNA. The alkali-labile sites are stable up to a pH of 12.5 but are eliminated at a pH of 13, as in the *in vivo* rodent alkaline assay, causing DNA strand breaks (Eastman & Barry, 1992).

The difference of genotoxic activity observable in stomach and in duodenum cells may be related to the fact that the concentration of **Catechol** in contact with the tested organ is higher in the stomach than in the duodenum.

The observation of the slides at the two highest doses tested of 400 and 200 mg/kg/day (x2) during image analysis showed a total absence of ghost cells, as well as a very low cell density, that may be related to the total lysis of the cells after DNA fragmentation. The strong pulverization of DNA hindered correct staining of the DNA and thus observation and scoring of comet cells. The limit of detection has been trespassed. Furthermore, the lowest dose tested of 100 mg/kg/day (x2), inducing a genotoxic activity in the comet assay, presented a normal cell density on the slides during image analysis.

The absence of signs of cytotoxicity at the three doses tested using techniques such as Trypan blue vital exclusion method and the measurement of the percentage of ghost cells on the slides may be due to the fact that some ghost cells are not visible on the slides. Indeed, as stated by Burlinson (2007), for certain chemicals, the enhanced DNA migration is not observed in the *in vivo* rodent alkaline comet assay, despite the presence of necrosis or apoptosis in the target organs. In that case, the cytotoxicity is directly exerted by **Catechol**.

### 2/ The test item Catechol is most probably an oxidizing agent, producing free radicals damaging DNA.

In order to show that reactive oxygen species may be involved in the genotoxic activity of **Catechol**, an *in vivo* rodent alkaline (pH>13) comet assay adding a specific endonuclease enzyme, e.g. formamidopyrimidine-DNA glycosylase (Fpg), could be performed *at lower doses* than the ones tested in the current study.

The Fpg enzyme presents a DNA glycosylase activity, associated with an AP lyase activity leading to the formation of AP sites in DNA followed by the formation of single strand DNA breaks. In a normal cell, DNA repair is achieved by the action of other enzymes (DNA polymerase and DNA ligase). Under the conditions of the Comet assay, these enzymes are present until the sacrifice of animals but are absent during the Unwinding, Electrophoresis and staining steps of the Comet Assay. The adjunction of Fpg during the Comet assay allows to increase the number of breaks in DNA induced through an oxidizing mechanism and leads to an increase in comet response in case of DNA oxidative damage induced by **Catechol**.

The expected results after treatment with **Catechol** and addition of Fpg, would be an increase in median OTM values, compared to the OTM values of cells exposed to **Catechol** alone, without addition of Fpg enzyme.

Nevertheless, performing this new comet assay will not modify the results and conclusions of the current study.

The decrease in the median OTM in stomach and duodenum cells when increasing the doses of **Catechol** and the reverse dose-response relationship indicate the possible existence of a bell-shape curved. As described by Burlinson et Al (2007), in some cases it is also possible to detect a decrease in DNA migration, as observed with **Catechol** in stomach and duodenum cells, due to:

- the loss of heavily damaged or dying cells during sample processing or electrophoresis, and /or secondary toxicity induced by **Catechol**.
- The downturn phenomenon in the dose-response curve may also be attributed to an altered bioavailability at higher dose levels.

Due to the bell-shape curve effect of the genotoxic activity of **Catechol**, it is not excluded that **Catechol** may display genotoxic activity both in stomach and duodenum cells at dose-levels lower than 100 mg/kg/day (x2).

#### **TABLE 2**

## in vivo COMET ASSAY IN ISOLATED RAT STOMACH CELLS RECAPITULATIVE TABLE

SPONSOR:

RHODIA

Species: RAT

TEST ITEM:

Catéchol

Strain: OFA SPRAGUE DAWLEY

VEHICLE:

Distilled water

Sex: male

DOSING VOLUME:

10 mL/kg

Administration route: oral

Number of groups: 3

Number of animals: 4

ORGAN: STOMACH

1<sup>st</sup> treatment: 25/09/2007 2<sup>nd</sup> treatment\*: 26/09/2007

\* the positive control was treated once at that date

	In vivo	COMET ASSA	Y IN ISOL	ATED RAT S	гомасн	CELLS						
GROUPS	COMPOUND	mg/kg/day (x2)	OTM Median	F of Snedecor (homogeneity of variances)	NON PAI	Relative ratio of						
			for 600 cells <sup>(1)</sup>		p kruskall- wallis <sup>(2)</sup>	p Mann- whitney <sup>(3)</sup>	ghost cells <sup>(4)</sup>					
Solvent control	Distilled water	0	2.26	p<0.0001	p<0.0001				2.26		•	-
	Catéchol	400	0.81			p<0.0001	p<0.0001	0.54				
TREATED		200	0.35			p 40.0001	1 '	p 10.0001	p<0.0001	0.59		
		100	1.13			p<0.0001	0.96					
Positive control	MNNG	20 mg/kg/day (x1)	5.37	-	-	p<0.0001	0.95					

<sup>1</sup> For 450 cells in positive control

<sup>2:</sup> Total group without positive control

<sup>3&#</sup>x27; OTM values obtained in treated group compared to OTM values obtained in solvent control group

<sup>4.</sup> Corresponds to the percentage of ghost cells per treated group /percentage of ghost cell in negative control group.

#### **TABLE 3**

## in vivo COMET ASSAY IN ISOLATED RAT DUODENUM CELLS RECAPITULATIVE TABLE

SPONSOR:

**RHODIA** 

Species: RAT

TEST ITEM:

CATECHOL

Strain: OFA SPRAGUE DAWLEY

VEHICLE: DOSING VOLUME: Distilled water 10 mL/kg

Sex: male Administration route: oral

Number of groups: 3 Number of animals: 4

ORGAN: DUODENUM

1<sup>st</sup> treatment: 25/09/2007 2<sup>nd</sup> treatment\*: 26/09/2007

\* the positive control was treated once at that date

	in vivo	COMET ASSAY	IN ISOLA	TED RAT DU	ODENUM	CELLS					
GROUPS	COMPOUND	DOSES in mg/kg/day (x2)	OTM Median for 600 cells <sup>(1)</sup>	F of Snedecor (homogeneity of variances)		RAMETRIC l evaluation	Relative ratio of ghost cells <sup>(4)</sup>				
					p kruskall- wallis <sup>(2)</sup>	p Mann- whitney <sup>(3)</sup>					
Solvent control	Distilled water	0	1.48	p<0.0001	p<0.0001	8	В			-	-
		400	1.28				p<0.0001	N.S.	0.79		
TREATED	Catéchol	200	3.38			p 10.000.	p<0.0001	0.94			
		100	4.64						p<0.0001	1.10	
Positive control	Dimethylhydrazine	20 mg/kg/day (x1)	8.94	-	-	p<0.0001	0.87				

<sup>1</sup> For 450 cells in positive control

<sup>2:</sup> Total group without positive control

<sup>3:</sup> OTM values obtained in treated group compared to OTM values obtained in solvent control group

<sup>4&</sup>lt;sup>-</sup> Corresponds to the percentage of ghost cells per treated group /percentage of ghost cell in negative control group

## FIGURE 1 in vivo COMET ASSAY IN ISOLATED RAT STOMACH CELLS

#### **OTM MEDIAN per group**

SPONSOR:

**RHODIA** 

Species: RAT

TEST ITEM:

Catéchol

Strain: OFA SPRAGUE DAWLEY

VEHICLE:

Distilled water

Sex: male

DOSING VOLUME:

10 mL/kg

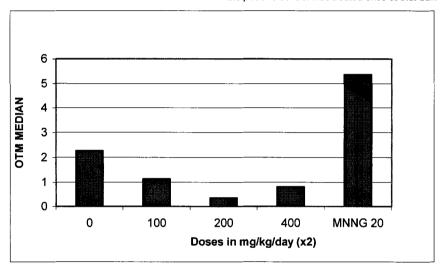
Administration route: oral Number of groups: 3

Number of animals: 4

ORGAN: STO

1<sup>st</sup> treatment: 25/09/2007 **STOMACH** 2<sup>nd</sup> treatment\*: 26/09/2007

\* the positive control was treated once at that date



#### **Conclusion:**

A statistically significant linear trend in nuclear fragmentation, excluding positive control was revealed by the Kruskall-Wallis test. The analysis showed a statistically significant dose-related decrease in the median OTM at the three tested doses of 400 – 200 and 100 mg/kg/day (x2). The trend had hence no meaning in terms of genotoxicity.

# FIGURE 2 in vivo COMET ASSAY IN ISOLATED RAT DUODENUM CELLS

#### **OTM MEDIAN per group**

SPONSOR:

RHODIA

Species: RAT

TEST ITEM:

CATECHOL

Strain: OFA SPRAGUE DAWLEY

VEHICLE:

Distilled water

Sex: male

DOSING VOLUME:

10 mL/kg

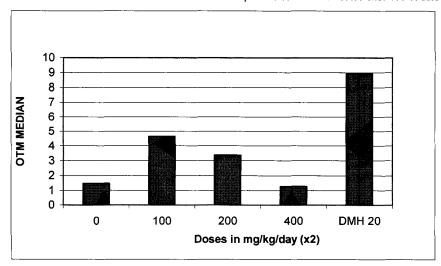
Administration route: oral

Number of groups: 3 Number of animals: 4

ORGAN: DUODENUM

1<sup>st</sup> treatment: 25/09/2007 2<sup>nd</sup> treatment\*: 26/09/2007

\* the positive control was treated once at that date



#### **Conclusion:**

A statistically significant linear trend in nuclear fragmentation, excluding positive control was revealed by the Kruskall-Wallis test.

### D. CONCLUSION

The test item CATECHOL (batch FPC0619301) provided by RHODIA was investigated by the means of the *in vivo* comet assay on stomach and duodenum, under alkaline conditions (SCGE) in the male OFA Sprague Dawley rats treated orally twice with 400, 200 and 100 mg/kg/day, with one sampling time 3 to 6 hours after the last treatment. Following the results of the toxicity assay, the maximum tolerated dose (MTD) determined was of 400 mg/kg/day. This dose was retained as the maximum dose to be tested, as well as two lower doses corresponding to MTD/2 and MTD/4. These two doses were not toxic, indeed, no clinical signs were observed.

Under these experimental conditions, CATECHOL induced no statistically significant increases in DNA strand breaks at non-lethal dose on rat *stomach* cells after oral administration. CATECHOL is hence devoid of genotoxic activity on the *stomach*.

In return, CATECHOL induced statistically significant increases in DNA strand breaks at non-lethal doses on rat *duodenum* cells after oral administration, with the highest increase of median OTM at the lowest dose tested of 100 mg/kg/day (x2). Furthermore, the very low cell density observed at the two highest doses tested during image analysis, indicates a probable cell lysis due to cytotoxicity and /or highly damaged cells with loss of information. Regarding the criteria described in paragraph 9, a test item is found to demonstrate genotoxic properties against the target organ if it results in a statistically significant increase in the OTM median compared with the negative control group and if the genotoxicity detected shows a dose-effect relationship. In fact the results showed a statistically significant increase in the median OTM, but with an inverse dose-effect relation, with a bell-shaped curve response. The test item Catechol was thus considered as genotoxic on rat duodenum cells.

It would be useful to implement a complementary assay under the same experimental conditions on duodenum cells only, but using doses lower than 100 mg/kg/day (x2), in order to determine if there is a high dose without genotoxic effect under the dose level of 100 mg/kg/day (x2). Under these conditions, CATECHOL was considered as a DNA strand breaks and/or alkali-labile sites inducer on duodenum cells.

A satisfactory agreement was observed between the actual and nominal concentrations of CATECHOL in treatment solutions used in the in vivo comet assay performed on stomach and duodenum. Indeed, the deviations from nominal concentrations were within an acceptable range of ±10%.

#### E. REFERENCES

Ashby J., Tinwell H., Lefevre P.A., Browne M.A.

The single cell gel electrophoresis assay for induced DNA damage (comet assay): measurement of tail length and moment

Mutagenesis 10 (1995) 85-90.

Bauer E., Recknagel R.D., Fiedler U., Wollweber L., Bock C., Greulich K.O.

The distribution of the tail moment in single cell gel electrophoresis (comet assay) obeys a chi-square ( $\chi^2$ ) not a gaussian distribution

Mutat. Res. 398 (1998) 101-110.

**Brault** D, Renault D, Tombolan F, Thybaud V. Kinetics of induction of DNA damage and lacZ gene mutations in stomach mucosa of mice treated with beta-propiolactone and N-methyl-N'-nitro-N-nitrosoguanidine, using single-cell gel electrophoresis and Mutamouse models. Environ Mol Mutagen. 1999;34(2-3):182-9.

Burlinson B, An in vivo unscheduled DNA synthesis (UDS) assay in the rat gastric mucosa: preliminary development.

Carcinogenesis. 1989 Aug;10(8):1425-8.

Burlinson B., Tice RR, Speit G, Agurell E. et al.

Fourth International Workgroup on Genotoxicity testing: results of the *in vivo* comet assay workgroup. Mutat Res 627 (2007) 31-5

Eastman A., Barry MA.

The origins of DNA breaks: a consequence of DNA damage, DNA repair, or apoptosis? Cancer Invest. 1992; 10(3): 229-40.

**Evans** GS, Flint N, Somers AS, Eyden B, Potten CS. The development of a method for the preparation of rat intestinal epithelial cell primary cultures. J Cell Sci. 1992 Jan;101 ( Pt 1):219-31.

**Fielder** R.J., Allen J.A., Boobis A.R., Botham P.A., Doe J., Esdaile D.J., Gathehouse D.G., Hosdon-Walker G., MORTON D.B., Kirkland D.J. and Richold M.

Dose setting in vivo mutagenicity assays

Mutagenesis, 7 (1992), 313-319.

Fairbairn D.W., Olive P.L., O'Neill K.L.

The comet assay: a comprehensive review

Mutat. Res. 339 (1995) 37-59.

**Hartmann** A, Schumacher M, Plappert-Helbig U, Lowe P, Suter W, Mueller L. Use of the alkaline in vivo Comet assay for mechanistic genotoxicity investigations. Mutagenesis. 2004 Jan;19(1):51-9.

Hellman B., Vaghef H., Boström B.

The concepts of tail moment and tail inertia in the single cell gel electrophoresis assay Mutat. Res. 336 (1995) 123-131.

McKelvey-Martin V.J., Green M.H.L., Schmezer P., Pool-Zobel B.L., De Méo M.P., Collins A. The single cell gel electrophoresis assay (comet assay): a European review Mutat. Res. 288 (1993) 47-63.

Olive P.L., Banath J.P., Durand R.E.

Heterogeneity in radiation-induced DNA damage and repair in tumor and normal cells measured using the "comet" assay

Radiat. Res. 122 (1990) 86-94.

Ostling O., Johanson K. J.

Microelectrophoretic study of radiation-induced DNA damages in individual mammalian cells Biochem. Biophys. Res. Commun. 123 (1984) 291-298.

### FSR-IPL 070402 / CATECHOL / RHODIA

Rojas E., Lopez M.C., Valverde M.

Single cell gel electrophoresis assay: methodology and applications

J. Chromatogr. 722 (1999) 225-254.

Singh N.P., McCoy M.T., Tice R.R., Schneider E.L

A simple technique for quantification of low levels of DNA damage in individual cells Exp. Cell Res. 175 (1988) 184-191.

Tice R.R., Strauss G.H.

The single cell gel electrophoresis/comet assay: a potential tool for detecting radiation-induced DNA damage in humans

Stem Cells 13 (1995) 207-214.

Tice R.R., Agurell E., Anderson D., Burlinson B., Hartmann A., Kobayashi H., Miyamae Y., Rojas E., Ryu J.C., Sasaki Y.F.

Single cell gel/comet assay: guidelines for In vivo and in vivo genetic toxicology testing, Environ. Mol. Mutagen. 35 (2000) 206-221.

Woods J.A., O'Leary K.A., McCarthy R.P., O'Brien N.M.

Preservation of comet assay slides: comparison with fresh slides

Mutat. Res. 429 (1999) 181-187.

FSR-IPL 070402 / CATECHOL / RHODIA	
Appendix No. 1: Individual results for the stomach	
••	

### in vivo COMET ASSAY IN ISOLATED RAT STOMACH and DUODENUM CELLS

### **ANIMAL WEIGHT**

SPONSOR: **TEST ITEM:**  **RHODIA** 

VOLUME:

**CATECHOL** 

Distilled water

10 mL/kg

Species: RAT

Strain: OFA SPRAGUE DAWLEY

Sex: male

Administration route: oral

Number of groups: 3 Number of animals: 4

ORGAN: STOMACH

**DUODENUM** 

1<sup>st</sup> treatment: 25/09/2007 2<sup>riu</sup> treatment\*: 26/09/2007

Negative gro	control oup	Ontrol TREATED GROUPS Pos						Stomach Positive control group		Duodenum Positive control group	
Distilled water DOSES in mg/kg/day (x2)						МІ	NNG	Dimethylhydrazine			
	)	40	0	20	00	10	0	20 mg/k	(g/day (x1) 20 mg/kg/day		/day (x1)
Animal	Weight	Animal	Weight	Animal	Weight	Animal	Weight	Animal	Weight	Animal	Weight
number	(g)	number	(g)	number	(g)	number	(g)	number	(g)	number	(g)
6511	185	6516	173	6521	160	6526	176	6531	163	6535	177
6512	188	6517	178	6522	180	6527	160	6532	177	6536	168
6513	167	6518	157	6523 178 6528 169			6533	172	6537	167	
6514	185	6519	186	6524	185	6529	179	6534	182	6538	192
6515	180	6520	178	6525	161	6530	156	-	-	_	-

<sup>\*:</sup> The positive control was treated once at that date

Mean	181	174.4	172.8	168.0	173.5	176
Sd	8.34	10.78	11.52	9.92	8.10	11.58
t		0.97	1.15	1.77	1.20	0.66
- 10		N.S	N.S	N.S.	N.S	N.S

### in vivo COMET ASSAY IN ISOLATED RAT STOMACH CELLS

# DETERMINATION OF THE VIABILITY OF THE ISOLATED RAT STOMACH CELLS

SPONSOR:

RHODIA

Species: RAT

TEST ITEM:

Catéchol

Strain: OFA SPRAGUE DAWLEY

VEHICLE:

Distilled water

Sex: male

DOSING VOLUME:

10 mL/kg

Administration route: oral

Number of groups: 3

Number of animals: 4

**ORGAN:** 

**STOMACH** 

1st treatment: 25/09/2007 2nd treatment\*: 26/09/2007

\*. The positive control was treated once at that date.

Solvent control	COMPOUND	DOSES in mg/kg/day (x2)	Animal number	Percentage of viability (%)	Relative viability compared to solvent control (%)
			6511	100.0	
Solvent			6512	100.0	
control	Distilled water	0	6513	(a)	-
Control			6514	100.0	
			6515	100.0	
	Catéchol		6516	(a)	(a)
			6517	100.0	100.0
		400	6518	100.0	100.0
			6519	94.4	94.4
			6520	100.0	100.0
			6521	100.0	100.0
			6522	98.3	98.3
TREATED		200	6523	(a)	(a)
			6524	97.5	97.5
Į l			6525	100.0	100.0
			6526	98.0	98.0
		400	6527	94.7	94.7
		100	6528	(a)	(a)
			6529	100.0	100.0
			6530	100.0	100.0
			6531	100.0	100.0
Positive	MNNG	20 mg/kg/day (x1)	6532	100.0	100.0
control			6533	(a)	(a)
L			6534	93.9	93.9

(a): Animal not used for the genotoxicity assay

# in vivo COMET ASSAY IN ISOLATED RAT STOMACH CELLS OLIVE TAIL MOMENT MEDIANS PER ANIMAL AND PER GROUP

SPONSOR:

RHODIA

Species: RAT

**TEST ITEM:** 

Catéchol

Strain: OFA SPRAGUE DAWLEY

VEHICLE:

Distilled water

Sex: male

DOSING VOLUME:

10 mL/kg

Administration route: oral

Number of groups: 3

Number of animals: 4

ORGAN:

STOMACH

1st treatment: 25/09/2007 2nd treatment\*: 26/09/2007

GROUPS	COMPOUND	DOSES in	Animal 1	Animal 2	Animal 3	Animal 4	Total group (4 animals)
		mg/kg/day (x2)	Median for 150 cells	Median for 150 cells	Median for 150 cells	Median for 150 cells	Median for 600 cells*
Solvent control	Distilled water	0	1.74	1.14	8.86	2.53	2.26
		400	5.45	0.45	2.51	0.13	0.81
TREATED	Catéchol	200	0.21	0.18	0.80	0.60	0.35
		100	0.96	1.49	1.02	1.26	1.13
Positive control	MNNG	20 mg/kg/day (x1)	24.89	9.28	1.08	,	5.37

<sup>\*</sup> Median for 450 cells in positive control

### **TABLE 7** in vivo COMET ASSAY IN ISOLATED RAT STOMACH CELLS OLIVE TAIL MOMENT MEDIAN PER SLIDE, PER ANIMAL AND PER GROUP

SPONSOR:

**RHODIA** 

Species: RAT

TEST ITEM: VEHICLE.

DOSING VOLUME

Catéchol Distilled water 10 mL/kg

Strain OFA SPRAGUE DAWLEY

Sex: male

Administration route: oral Number of groups. 3

ORGAN:

STOMACH

Number of animals. 4

1<sup>st</sup> treatment: 25/09/2007
2<sup>nd</sup> treatment\* 26/09/2007

1				Slide			Oliv	ve Tail Mo	ment	
1		DOSES in	Animal	number	Number of	Number of	per slide	per animal	per GROUP	
GROUPS	COMPOUND	mg/kg/day (x2)	number		analysed	analysed	·			
		mg/kg/day (xz/	number	BC-07-	cells /slide	cells /animal	Median (/50 cells)	Median (/150 cells)	Median (/600 cells)	
				213 A	50		1 74	(1.00 00)	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
			6512	213 B	50	150	0.78	1.74		
				213 C	50		3.00			
			6514	214 A 214 B	50 50	150	1.96 0.83	1.14		
Solvent	Distillad water	•	0314	214 C		130	0.83	1.14	0.00	
control	Distilled water	0		215 A	50 50		11.60		2.26	
1			6511	215 B	50	150	15 07	8.86		
				215 C 216 A	50 50		2.64 2.97			
			6515	216 B 216 C	50	150	1 21	2.53		
				216 C	50		3.84			
			6518	220 A 220 B	50 50	150	5.99 6.29	5.45		
			0310	220 C	50	130	4 70	0.40		
				221 A	50		0 36			
			6517	221 B	50	150	0.90	0.45		
		400		221 C 222 A	50 50		0.40 4 67		0.81	
i l			6520	222 B	50	150	3 02	2.51		
				222 C	50		1.31 0.08			
		200	6519	223 A 223 B	50	150	0 08	0.42		
			0519	223 B 223 C	50 50	150	0.16 0.14	0.13		
				224 A	50		0.20			
i I			6524	224 B	50	150	0 18	0.21		
	Catéchol			224 C 225 A	50 50		0.30 0.10			
			6521	225 B	50	150	0.10	0.18		
TREATED				225 C	50		0.47	0.10	0.35	
INLATED		200	eenn	226 A	50	450	1.52	0.00		
			6522	226 B 226 C	50 50	150	1.10 0.60	0.80		
				227 A	50		0.65			
			6525	227 B	50	150	0.41	0.60		
				227 C 228 A	50 50	<b></b>	1.06			
			6527	228 B	50	150	0.86 1.20	0.96		
				228 C 229 A	50		0 93	5.55		
			6529	229 A	50	150	0 76	4.40		
		400	0529	229 B 229 C	50 50	150	2.41 1.53	1.49		
		100		230 A	50		1.76	~	1.13	
			6526	230 B	50	150	0 56	1.02		
				230 C 231 A	50		1.61			
			6530	231 B	50 50	150	1.18 0.75	1.26		
				231 C	50		1 76			
			6504	217 A	50	450	24 73	04.00		
			6534	217 B 217 C	50 50	150	24.89 24.77	24.89		
Postitive				218 A	50	-	5 09			
	MNNG	20 mg/kg/day (x1)	6532	218 B	50	150	6.65	9.28	5.37	
control				218 C	50	<u> </u>	16.05		5.3 <i>1</i>	
			6531	219 A	50 50	150	1.27	1.08		
			0001	219 B 219 C	50 50	'~	1 22 0 98	1.00		

# TABLE 8 in vivo COMET ASSAY IN ISOLATED RAT STOMACH CELLS PERCENTAGE OF GHOST CELLS PER ANIMAL AND PER GROUP

SPONSOR:

RHODIA

Species: RAT

TEST ITEM:

Catéchol Distilled water Strain OFA SPRAGUE DAWLEY

Sex. male

VEHICLE DOSING VOLUME:

Distilled water 10 mL/kg

Administration route: oral Number of groups: 3 Number of animals: 4

1<sup>st</sup> treatment: 25/09/2007 2<sup>rd</sup> treatment\*: 26/09/2007

ORGAN:

STOMACH

		DOSES in	Animal	Slide	Number of	Percenta		st cells per		
GROUPS	COMPOUND	mg/kg/day (x2)	number	number	ghost cells per	per slide	per animal	per GROUP <sup>(1)</sup>	Relative ratio of ghost cells <sup>(2)</sup>	
		, (,		BC-07- 213 A	stide 17	25 4	<b>P</b> 2	per Ortoor	gnost cens	
			6512	213 B	7	12.3	22.41			
				213 C	21	29 6	1			
				214 A	20 17	28 6 25 4				
Solvent			6514	214 B	17	25 4	23.54		l	
	Distilled water	0		214 C	10	16.7 29 6		24.18	_	
control			6511	215 A 215 B	21 19	27 5	28.22			
			0311	215 C	19	27.5	20.22			
				216 A	12	19.4				
			6515	216 B 216 C	18	26.5	22.57			
				216 C	14	21.9				
			6518	220 A	6	10 7	13.74			
			0510	220 B 220 C	9	15.3 15.3	13.74			
				221 A	3	5.7				
				6517	221 B	7	12.3	10.07		
		400		221 C	7	12 3		13.15	0.54	
		700	2500	222 A	12	19.4	47.00	13.13	0.57	
			6520	222 B 222 C	11	18 0	17.06			
	l			223 A	8 7	13.8 12.3	<del>                                     </del>			
			6519	223 B	5	91	11.72			
				223 C	8	13 8	1			
				224 A	5	9 1				
				6524	224 B	9	15.3	9.40		
				224 C	2	3 8				
				6521	225 A 225 B	8 12	13.8 19.4	16.60		
			0521	225 C	10	16.7	10.00	44.00	0.59	
TREATED	Catéchol	200		226 A	8	13.8		14.30		
			6522	226 B	8 13	20.6	15.57			
				226 C	7	12 3				
			6505	227 A	7	12.3	45.00			
	1		6525	227 B 227 C	12	19 4	15.63			
				228 A	9 13	15 3 20 6				
			6527	228 B	11	18 0	22.75			
				228 B 228 C	21	29.6	1			
				229 A	27	35 1				
			6529	229 B	18	26 5	28.97			
		100		229 C	17	25.4 24.2		23.15	0.96	
			6526	230 A 230 B	16 13	20.6	20.51			
			0020	230 C	10	16 7	1 20.01			
				231 A	8	13.8				
			6530	231 B	15	23.1	20.37			
				231 C	16	24.2				
		_	6534	217 A	12	19.4	35.04			
			6534	217 B 217 C	24 16	32.4 24.2	25.34			
Postitive MNNG			218 A	16	24.2					
	20 mg/kg/day (x1)	6532	218 B	9	15.3	21.62	22.92	0.95		
control				218 C	17	25.4	1			
				219 A	16	24.2				
			6531	219 B	15	23.1	21.78	!		
			<u> </u>	219 C	11 Is for positive c	18.0	i			

<sup>1</sup> Percentage for 600 cells for solvent control and treated groups, for 450 cells for positive control group

<sup>2.</sup> Corresponds to the percentage of ghost cells per treated group /percentage of ghost cell in negative control group.

# Appendix No. 2: Individual results for the duodenum

#### **TABLE 9**

# in vivo COMET ASSAY IN ISOLATED RAT DUODENUM CELLS

# DETERMINATION OF THE VIABILITY OF THE ISOLATED RAT DUODENUM CELLS

SPONSOR:

**RHODIA** 

Species: RAT

TEST ITEM:

**CATECHOL** 

Strain: OFA SPRAGUE DAWLEY

VEHICLE:

Distilled water

Sex: male

DOSING VOLUME:

10 mL/kg

Administration route: oral

Number of groups: 3 Number of animals: 4

1st treatment: 25/09/2007

ORGAN:

**DUODENUM** 

2nd treatment\*: 26/09/2007

\*: The positive control was treated once at that date.

Solvent control	COMPOUND	DOSES in mg/kg/day (x2)	Animal number	Percentage of viability (%)	Relative viability compared to solvent control (%)
Solvent control	Distilled water	0	6511 6512 6513 6514 6515	94.1 94.3 (a) 90.3 91.9	-
		400	6516 6517 6518 6519 6520	(a) 93.4 94.1 89.4 92.5	(a) 100.8 101.6 96.5 99.8
TREATED	CATECHOL	200	6521 6522 6523 6524 6525	91.6 89.2 (a) 91.6 89.4	98.9 96.3 (a) 98.9 96.5
		100	6526 6527 6528 6529 6530	92.8 91.0 (a) 93.1 95.2	100.2 98.2 (a) 100.5 102.8
Positive control	Dimethylhydrazine	20 mg/kg/day (x1)	6535 6536 6537 6538	88.4 (a) 92.8 91.4	95.4 (a) 100.1 98.7

(a): Animal not used for the genotoxicity assay

# in vivo COMET ASSAY IN ISOLATED RAT DUODENUM CELLS OLIVE TAIL MOMENT MEDIANS PER ANIMAL AND PER GROUP

SPONSOR:

RHODIA

Species: RAT

**TEST ITEM:** 

CATECHOL

Strain: OFA SPRAGUE DAWLEY

VEHICLE:

Distilled water

Sex: male

DOSING VOLUME:

10 mL/kg

Administration route: oral

Number of groups: 3 Number of animals: 4

ORGAN:

**DUODENUM** 

1st treatment: 25/09/2007 2nd treatment\*: 26/09/2007

GROUPS	COMPOUND	DOSES in	Animal 1	Animal 2	Animal 3	Animal 4	Total group (4 animals)
GROOFS	COMPOSITO	mg/kg/day (x2)	Median for 150 cells	Median for 150 cells	Median for 150 cells	Median for 150 cells	Median for 600 cells*
Solvent control	Distilled water	0	1.25	1.58	4.58	0.48	1.48
			0.90	2.18	0.59	1.60	1.28
TREATED	CATECHOL	200	1.43	2.23	6.07	4.21	3.38
		100	9.73	7.29	3.12	2.49	4.64
Positive control	Dimethylhydra zine	20 mg/kg/day (x1)	9.37	11.19	7.37	-	8.94

<sup>\*:</sup> Median for 450 cells in positive control

# in vivo COMET ASSAY IN ISOLATED RAT DUODENUM CELLS OLIVE TAIL MOMENT MEDIAN PER SLIDE, PER ANIMAL AND PER GROUP

SPONSOR:

RHODIA

TEST ITEM:

CATECHOL

Strain: OFA SPRAGUE DAWLEY

VEHICLE. DOSING VOLUME: Distilled water 10 mL/kg

Sex: male

Administration route oral Number of groups: 3

Number of groups. 5 Number of animals: 4 1<sup>st</sup> treatment. 25/09/2007 2<sup>nd</sup> treatment\*. 26/09/2007

ORGAN:

DUODENUM

-	ſ				. The positi	/e control was		e Tail Mo	
GROUPS	COMPOUND	DOSES in	Animal	Slide number	Number of analysed	Number of analysed	per slide	per animal	per GROUP
GROUPS	COMPOSIED	mg/kg/day (x2)	number	BC-07-	cells /slide	cells /animal	Median (/50 cells)	Median (/150 cells)	Median (/600 cells)
			6512	232 A 232 B 232 C	50 50 50	150	1.31 1 11 1 77	1.25	
Solvent Distilled west	Distilled water	0	6514	233 A 233 B 233 C	50 50 50	150	0.37 2.94 1.80	1.58	4.40
control	Distilled water	U	6511	234 A 234 B 234 C	50 50 50	150	12 09 1 56 4 70	4 58	1.48
			6515	235 A 235 B 235 C	50 50 50	150	0 97 0 20 0 98	0.48	
		6518	239 A 239 B 239 C	50 50 50	150	0 91 0.66 0.96	0.90		
		400	6517	240 A 240 B 240 C	50 50 50	150	0.87 6.03 1.50	2.18	1.28
		700	6520	241 A 241 B 241 C	50 50 50	150	0 20 1 57 0.60	0.59	1.20
	CATECHOL		6519	242 A 242 B 242 C	50 50 50	150	3.89 1.10 1 27	1.60	
		200	6524	243 A 243 B 243 C	50 50 50 50	150	4.12 0.79 1.76	1.43	
TREATED			6521	244 A 244 B 244 C	50 50 50 50	150	3 03 0.83 3.14	2.23	3.38
	0,11,201,02		6522	245 A 245 B 245 C	50 50	150	11 84 4 22 6.65	6.07	
			6525	246 A 246 B 246 C	50 50 50	150	5.07 1 61 7 01	4.21	
			6527	247 A 247 B 247 C	50 50 50	150	21.97 7 64 5 94	9.73	
		100	6529	248 A 248 B 248 C	50 50 50	150	13.42 5 16 6 63	7.29	4.64
			6526	249 A 249 B 249 C	50 50 50	150	8 44 3 78 1 21	3.12	
			6530	250 A 250 B 250 C	50 50 50	150	2 08 1.98 3.74	2.49	
			6535	236 A 236 B 236 C	50 50 50	150	8 89 9.22 11.20	9.37	
Postitive control	Dimethylhydrazine	20 mg/kg/day (x1)	6537	237 A 237 B 237 C	50 50 50	150	15.18 6.95 8.70	11.19	8.94
			6538	238 A 238 B 238 C	50 50 50	150	7 32 4 48 13.27	7.37	

### TABLE 12 in vivo COMET ASSAY IN ISOLATED RAT DUODENUM CELLS PERCENTAGE OF GHOST CELLS PER ANIMAL AND PER GROUP

SPONSOR:

RHODIA

Species RAT

TEST ITEM:

**CATECHOL** 

Strain. OFA SPRAGUE DAWLEY

VEHICLE. DOSING VOLUME: Distilled water 10 mL/kg

Sex: male Administration route: oral

Number of groups 3

Number of animals 4

1<sup>st</sup> treatment: 25/09/2007

ORGAN:

DUODENUM

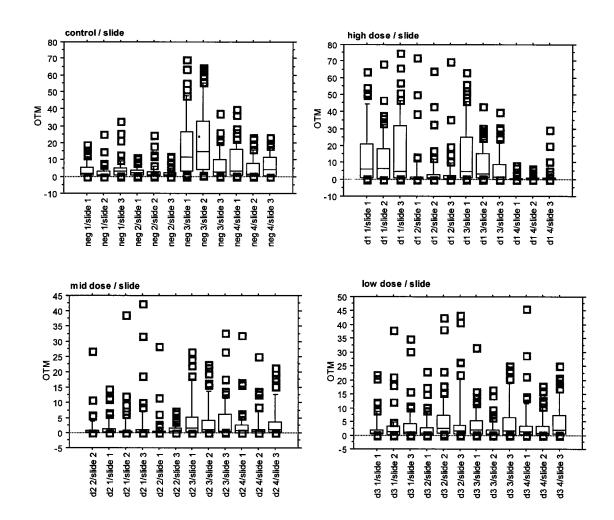
2<sup>nd</sup> treatment\*: 26/09/2007
\*: The positive control was treated once at that date

	· · · · · · · · · · · · · · · · · · ·	DOSES in	Animal	Slide	Number of		reated once at	st cells per	Γ
GROUPS	COMPOUND	mg/kg/day (x2)	number	number	ghost cells per	per slide	per animal	per GROUP <sup>(1)</sup>	Relative ratio of ghost cells <sup>(2)</sup>
		gg. e-y (x=)		BC-07- 232 A	slide 4	7 4	peranna	per GROOP	gnost cells**
			6512	232 A	18	26.5	15.39		
l i			00.2	232 C	7	12.3	1 10.00		
]				233 A	7	123			
i i	'	Ì	6514	233 B	22	30.6	21.97	]	j
Solvent	Distilled water	l o		233 C	15	23.1		18.70	_
control	Distinca Water	l "		234 A	24	32.4		10.70	I -
			6511	234 B 234 C 235 A	7	12.3	22.20		
				234 C	14	21.9			
			6515	235 A 235 B	8	15 3 13 8	15.24		
i			0515	235 B	10	16 7	15.24		
				239 A	6	10 7			
i i			6518	239 B	7	12.3	14.12		1
				239 C	12	19.4	1 ''''-		
				240 A	10	16.7			
		6517	240 B	12 10	19.4	17.56			
	400		240 B 240 C	10	16 7		14.72	0.79	
	700		241 A	12	19 4		14.72	0.79	
		6520	241 B	· · · 10	16 7	17.09			
				241 C	9	15 3			
i i			6519	242 A	4	7.4	10.10		1
		200	0515	242 B 242 C	8 5	13.8	10.10		
				243 A	13	9 1 20.6			<u> </u>
1			6524	243 B	14	21.9	16.64		
			0524	243 C	4	7.4	1 10.07		
l i			6521	244 A	9				
				244 B	13	15.3 20 6	17.52		
TREATED	CATECHOL			244 C	10	16 7		17.64	0.94
	OATEOHOL			245 A	12	19 4			
ļ			6522	245 B	7	12.3	17.84		
1				245 C	14	21.9			
			6525	246 A 246 B	18 4	26 5 7 4	18.58		
i			0525	246 C	14	21.9	10.50		
			_	246 C 247 A	23	31.5			<del></del>
			6527	247 B	23 21	29 6	26.81		
				247 C	12	19.4	1		
\ \ \		ł		248 A	11	18.0			<b>\</b>
			6529	248 B	11	18 0	28.35		İ
		100		248 C	48 16	49.0		20.57	1.10
1		.00	2500	249 A	16	24.2		20.07	'.''
			6526	249 B 249 C	9	15 3	14.45		
				249 C	2	3 8 9.1			
			6530	250 A	<u>5</u>	12.3_	12.68		
			- 5555	250 B 250 C	10	16.7	'2.00		1
	<del></del>			1 236 A	7	12.3			
			6535	236 B	12	19.4	15.63		1
]		1		236 C	9	15 3			
Postitive				237 A	6	10.7			
-	control Dimethylhydrazine	20 mg/kg/day (x1)	6537	237 B	12	19 4	15.58	16.26	0.87
CONTROL				237 C	10	16.7			0.07
			6538	238 A	12	19 4	1756		
			0030	238 B	10	16.7	17.56		
		L	L	238 C	10	16.7		·	<u> </u>

<sup>1.</sup> Percentage for 600 cells for solvent control and treated groups, for 450 cells for positive control group

<sup>2:</sup> Corresponds to the percentage of ghost cells per treated group /percentage of ghost cell in negative control group.

Appendix No. 3: Individual representation of distributions / Stomach



High dose d1 : 400 mg/kg/day (x2) Mid dose d2 : 200 mg/kg/day (x2) Low dose d3 : 100 mg/kg/day (x2)

# Appendix No. 4: Non-parametric statistical analysis / Stomach

# □ F OF SNEDECOR: HOMOGENEITY BETWEEN GROUP VARIANCES / STOMACH

F test for OTM
Total group w/o positive control

	Variance Ratio	Num. DDL	Denom D	DL F	р
1, 2	6 094	599	598	6.094	<.0001
1, 3	3.982	599	599	3 982	<.0001
1, neg	1.489	599	599	1 489	<.0001
2, 3	.653	598	599	.653	< 0001
2, neg	244	598	599	.244	< 0001
3, neg	374	599	599	.374	<.0001

# Group OTM Total group w/o positive control

	Number	Mean	Variance	Std dev	Std Error
1	600	7.095	185.007	13.602	.555
2	599	2 457	30.358	5.510	.225
3	600	3.886	46.460	6 816	.278
neg	600	6 982	124.227	11.146	455

# ☐ KRUSKALL-WALLIS / STOMACH

DDL	3
# Groupes	4
# ex-aequo	1
Н	174 038
P value	<.0001
Corrected H for ex-aequo	174 038
Corrected p for ex-aequo	<.0001
450 omitted occurrences	

	Number	Sum of Ranks	Mean of Ranks
1	600	713386 000	1188 977
2	599	551162 000	920.137
3	600	749130.500	1248 551
neg	600	865121.500	1441 869

# ☐ MANN-WHITNEY / STOMACH

# • CONTROL vs. HIGH DOSE

# Mann-Whitney U for OTM control vs. high dose

U	145213 000
U'	214787.000
Z value	-5 795
P value	<.0001
Corrected Z for ex-aequo	-5 795
Corrected p for ex-aequo	< 0001
# ex-aequo	1

1649 omitted occurrences

	Number	Sum of Ranks	Mean of Ranks
1	600	325513 000	542 522
neg	600	395087.000	658 478

<sup>1649</sup> omitted occurrences

# CONTROL vs. MID DOSE

# Mann-Whitney U for OTM control vs. mid dose

U	102553.000
U'	256847.000
Z value	-12.869
P value	<.0001
Corrected Z for ex-aequo	-12.869
Corrected p for ex-aequo	< 0001
# ex-aequo	1
1650 omitted occurrences	

	Number	Sum of Ranks	Mean of Ranks
2	599	282253 000	471.207
neg	600	437147.000	728.578

# • CONTROL vs. LOW DOSE

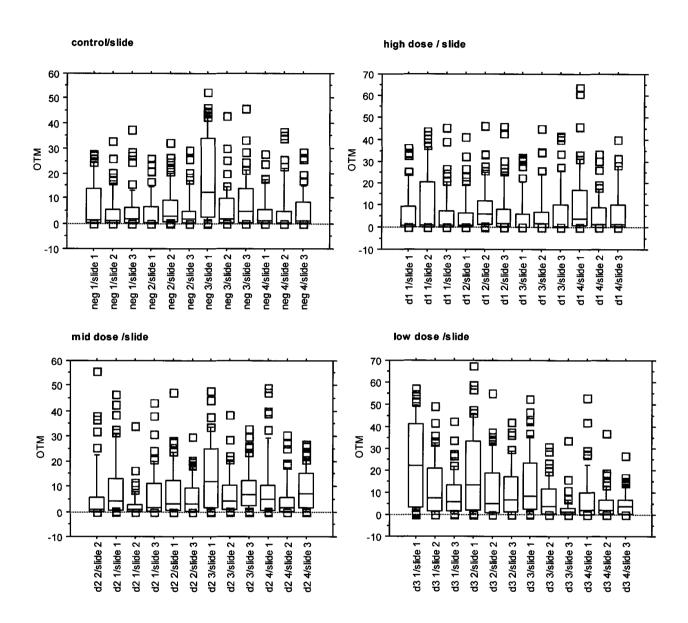
# Mann-Whitney U for OTM control vs. low dose

U	146812 500
Uʻ	213187 500
Z value	-5 529
P value	<.0001
Corrected z for ex-aequo	-5 529
Corrected p for ex-aequo	< 0001
# ex-aequo	1

1649 omitted occurrences

	Number	Sum of Ranks	Mean of Ranks
3	600	327112.500	545.188
neg	600	393487.500	655.813

Appendix No. 5: Individual representation of distributions / Duodenum



High dose d1 : 400 mg/kg/day (x2) Mid dose d2 : 200 mg/kg/day (x2) Low dose d3 : 100 mg/kg/day (x2)

# Appendix No. 6: Non-parametric statistical analysis / Duodenum

# □ F OF SNEDECOR: HOMOGENEITY BETWEEN GROUP VARIANCES / DUODENUM

#### F Test for OTM

Total groups w/o positive control

_	Variance ratio	Num DDL	Denom Di	DL F	р
1, 2	1 194	599	599	1.194	.0301
1, 3	.717	599	599	.717	<.0001
1, neg	1 299	599	598	1.299	.0014
2, 3	.601	599	599	601	<.0001
2, neg	1.088	599	598	1.088	.3042
3, neg	1.810	599	598	1.810	< 0001

### **Group OTM**

Group Variable: total groups w/o positive control

	Number	Mean	Variance	Std Dev	Std Error
1	600	7.213	127 645	11.298	.461
2	600	7.744	106 892	10 339	.422
3	600	10 550	177.908	13 338	545
neg	599	6 513	98 276	9 913	.405

### ☐ KRUSKALL-WALLIS / DUODENUM

DDL	3
# Groupes	4
# ex-aequo	2
Н	65 392
P value	< 0001
Corrected H for ex-aequo	65.394
Corrected p for ex-aequo	< 0001
450 omitted occurrences	

	Number	Sum of Ranks	Mean of Ranks
1	600	656294 000	1093.823
2	600	747237.000	1245 395
3	600	819944 000	1366 573
neg	599	655325.000	1094 032

# □ MANN-WHITNEY / DUODENUM

# • CONTROL vs. HIGH DOSE

# Mann-Whitney U for OTM control vs. high dose

U	179360.000
U'	180040 000
Z value	- 057
P value	9548
Corrected z for ex-aequo	057
Corrected p for ex-aequo	9548
# ex-aequo	1

1650 omitted occurrences

	Number	Sum of Ranks	Mean of Ranks
1	600	359660 000	599 433
neg	599	359740 000	600 568

1650 omitted occurrences

#### • CONTROL vs. MID DOSE

# Mann-Whitney U for OTM control vs. mid dose

U	156344 000
Uʻ	203056.000
Z value	-3 896
P value	<.0001
Corrected Z for ex-aequo	-3 896
Corrected p for ex-aequo	<.0001
# ex-aequo	1

1650 omitted occurrences

	Number	Sum of Ranks	Mean of Ranks
2	600	383356.000	638 927
neg	599	336044.000	561.008

# • CONTROL vs. LOW DOSE

# Mann-Whitney U for OTM control vs. Low dose

U	139241 000
U'	220159 000
Z value	-6.749
P value	<.0001
Corrected z for ex-aequo	-6 749
Corrected p for ex-aequo	< 0001
# ex-aequo	2
1650 omitted occurrences	

	Number	Sum of Ranks	Mean of Ranks
3	600	400459.000	667.432
neg	599	318941.000	532.456

Appendix No. 7: Individual values for Nuclei's OTM / STOMACH

Animal N°		(ZX) ARO/DX					<u>.</u>	7007/60/07				
	L	6512			6514			6511			6515	
Slide No. BC-0/-	213 A	213B	213 C	214 A	214 B	214 C	215 A	215 B	215 C	_ 216 A	216 B	216 C
Code BC-07-13	õ	025	8	j S	005	33	- 14	E2	E3	9	G2	- 1
FILE NO. BC-07-13	X.	Olive FallWoment	U3.XIS	SIX. D	Olive LailMoment	OS.XIS	EI.XIS	ve i allMome	SIX.CO TU	SIX:15	Olive Fall Moment	SIX.SS
	4.05	0.72		0.04	0.40	0.01	8.02	24.89	11.38	2.22	0.26	3.80
2	13.34	0.35		3.20	2.35		2.55	1.36	0.28	17.67	22.45	1
3	8.45	1.26		8.90	1.09		2.27	1.74	0.23	1.38	0.18	
4	2.32	0.01	1.54	0.57	60'0	1.83	6.83	21.04	1.69	0.34	16.31	
5	0.21	3.35		0.24	2.23	- 1	1.14	62.38	1.09	0.68	0.58	- 1
9	6.14	2.23		2.85	6.57	- 1	33.20	63.05	9.57	1.97	0.54	- 1
	1.94	1.02		10.55	2.30	- 1	20.80	27.13	05.4	0.46	0.67	- 1
0	7.30	70.0		2.20	2.00	- 1	13.37	10.98	1.30	46.48	0.00	- 1
e 5	12.77	0.00		180	140	- 1	7.15	22.00	4.33	10.40	0.20	- 1
2 -	77.7	5.5		88.0	18 17	- 1	0.77	5.47	22.15	13.5	2.50	- 1
12	06.0	0.32		7.79	24.68	1	0.67	0.12	0.20	2.47	19.44	1
100	0.83	24.94		4.75	0.85	5.71	26.80	32.44	1.85	18.52	0.23	1
14	3.12	15.02		2.88	0,16		2.97	22.67	0.35	26.07	0.38	1
15	3.61	4.75		0.27	0.55		1.20	0.58	1.17	15.08	3.93	l I
16	1.57	3.98		1.67	0.47	5.11	20.86	40.36	0.51	0.10	14.75	
17	0.91	0.44		0.96	3.84	- 1	22.12	1.33	0.13	16.71	3.33	- 1
18	3.30	0.05		3.33	1.30	- 1	51.62	13.60	18.61	0.18	0.81	- 1
19	1.76	0.25		5.06	1.19	- 1	0.04	59.95	5.42	12.73	1.05	- 1
20	1.72	0.25		0.10	0.14	- 1	9.74	29.73	2.27	19.90	6.79	- 1
21	2.70	20.0		7.00	0.82		60.03	46.53	0.30	70.0	8.43	- 1
77	10.38	0.0		0.43	34	471	22.24	64.33	4 18	17.49	10.45	- 1
24	117	2.45		1.56	4.29		4.84	2.32	37.24	16.82	8.48	
25	9.50	1.24		2.83	0.79		63.54	6.11	13.28	7.89	2.19	1
26	15.94	1.51		5.58	3.88	1 1	10.49	12.05	3.33	0.16	5.32	1
27	2.32	3.06		2.01	0.10		14 08	12.60	1.28	0.17	3.55	
28	1.86	0.44		3.65	2.21	2.06	19.98	0.64	0.77	11.36	0.01	- 1
52	5.32	2.64		17.0	0.09	2.80	0.35	2.45	0.44	1.42	0.38	- 1
35	0.33	1.30		1.04	0.00	0.77	3.03	33.72	0.73	30.63	20.0	- 1
22	1,50	00.0		1 20	1 20	00.00	21.00	0.03	18.13	15.00	0.50	- 1
33	12.81	90.0		0.30	12.70	0.02	26.76	9.50	10.12	90.0	0.79	
375	75	0.32		5.70	0.68	0.14	7.56	7.22	11.98	0.57	2.96	
35	0.06	3.29		2.05	0.65	2.60	2.27	0.82	1.89	13.83	7.84	
36	0.02	0.03		2.64	12.17	4.79	5.79	35.07	3.01	7.50	15.31	
37	1.05	2.33		0.13	0.81	0.07	34.15	0.91	3.98	1.60	9.02	
38	3.25	0.48		2.33	3.21	11.82	34.42	33.13	16.81	39.60	0.05	- 1
39	0.12	80.0		3.50	0.00	11.3/	4.20	5.30	0.64	11.03	22.58	- 1
40	90.00	90.0		3.43	0.10	0.0	47.33	44.40	0.18	0.01	90.0	- 1
14	3.00	0.00		- 0	0.02	4.77	26.10	54 86	7.00	1 22	0.40	
7.7	0.00	0.55		42.1	132	102	12.82	4.29	0.06	3.05	0.39	- 1
44	090	3.84		3.94	0.01	0.19	47.63	50.48	0.27	18.09	1.36	
45	0.51	0.04		1.17	0.01	1.38	43.82	12.31	5.68	0.07	0.08	i
46	0.75	1.52		6.30	0.53	1.09	20.28	0.15	12.78	15.81	9.19	
47	5.30	0.00		1.22	1.43	0.24	12.70	33.22	0.52	28.43	80'0	
48	1.27	6.98		0.32	3.74	2.74	37.82	26.84	10.10	10.27	0.68	- 1
49	0.03	0.22		0.02	5.42	0.68	3.04	5.82	21.35	0.16	0.59	0.06
Stodionido Stodionido	0.00	0.37	27.78	100	60.0	) N	98.33	45.07	20.8	37.7	0.83	
Madianianimal		**		0.00	**	*	787	**		727		2.04
Modian/doso					-		2	2			2.00	

C-07- 7-13 -07-13	6518 220 A 220 B B1 B2 B1.xis B2.xis OliveTailMoment			6517			6520			6519	
. 8	A S S	XXX					2				
2	\$ G	220 C R3	221 A K1	221B K2	221 C K3	222 A D1	222 B	222 C D3	223 A S1	223 B S2	223 C S3
	OliveTailMon	B3.xls	K1.xls	K2.xls	K3.xls	D1.xls	D2.xls	D3.xls	S1.xls	S2.xls	S3.xls
	5		Ó	liveTailMomen	ent.	<u>lo</u>	Jive FailMomen	ent	Ō	OliveTailMomen	H
	H		0.18	32.68	0.12	21.16	19.04	0.00	0.05	6.61	0.31
	81 0.02	4.54	0.37	0.36	0.66	2.38	0.57	30.05	0.00	0.18	3.27
	+	07.11	13.43	0.33	0.42	0.03	7.54	0.12	0.00	200	0.16
		0.14	36.0	9.0	200	33.05	133	110	50.0	0.00	0.00
	+	0.14	0.24	0.01	1.25	2.24	0.49	3.83	0.43	5.63	0.32
	_	36.81	4.59	0.01	6.52	99'0	42.96	2.95	0.01	0.02	0.13
		17.45	0.00	5.47	0.01	39.65	1.13	1.52	0.01	0.11	0.07
		5.43	0.30	0.18	5.14	0.26	27.52	0.22	0.01	99.0	0.05
	+	0.90	0.13	0.84	0.24	46.22	0.15	0.15	2.16	0.11	334
	+	35.42	0.03	1.18	9.00	0.30	4 64	0.01	96	10.0	19.90
	+	27.10	0.00	0.23	20.02	0.03	30.53	2.24	0.02	1.03	37.0
	+	2.14	00.0	0.08	0.16	2.64	6.60	1.72	2.67	0.02	0.93
	H	0.51	0.22	0.08	0 03	0.96	0.05	0 05	0.72	0.01	0 10
		0.23	0.12	0.04	0.01	43.31	1.02	0.00	00'0	5.29	0.02
	-	34.98	0.72	0.39	0.03	0.06	2	39.77	0.02	0.16	0.32
	+	0.03	0.00	79.0	0.1/	1.7	1.5/	27.7	0.08	0.00	243
	+	0.50	0.10	1.01	0.00	7 52	0.50	24.25	0.00 9.05	3.37	2.5
	+	6.02	12	11.33	254	24.78	2.63	330	0.46	800	0.0
	+	14.55	38.70	0.03	0.02	0.59	0.01	18.33	0.54	000	0.0
		1.21	0.05	2.54	2.35	3.84	3.88	0.11	0.50	0.03	90.0
		5.96	90.0	0.65	0.12	0.62	0.35	0.00	0.85	0.03	0.03
	-	460	0.31	0.14	99.0	0.86	19.29	13.97	1.45	0.38	0.02
		20.0	200	0.11	0.30	25.08	19.54	0.02	0.03	65.0	200
	-	31.49	0.15	0.11	0.17	35.89	0.03	0.01	0.05	0.24	0.44
		43.83	0.00	60.0	19.62	56.07	2.12	0.51	0.42	0.05	0.24
		45.36	0.12	2.33	15.06	0.36	14.41	0.21	0.02	1.54	1.34
	+	4.53	0.73	0.27	1.71	12.10	12.13	8.57	0.03	0.01	<del>8</del>
	1	0.48	0.38	4.5	0.93		77.66	3.32	0.10	24.0	3 6
	+	46.70	25	160	35.39	0.15	0.19	11.57	000	037	29.37
	L	6.88	1.55	0.00	2.04	1.55	3.76	5.23	0 39	0.00	90.0
		0.16	0.90	0.14	0.02	11.76	3.40	30.79	90.0	1.27	0.01
	+	0.07	30.06	7.33	0.23	09.01	3.68	15.20	0.02	0.02	7.0
	+	25.68	0.76	122	222	0.46	5.27	11.12	0 0	062	0.00
	H	74.65	1.87	0.96	0.05	33.85	1.93	9.09	0.74	0.71	0.03
41 0.1		56.94	2.24	2.39	4.29	2.98	9.02	0.34	0.01	0.14	4.98
	+	50.91	41.0	2.97	0.47	11.40	0.15	0.00	0.37	0.11	0.10
	+	0.92	670	0.76	0.00	0.22	0.88	3.62	0.05	96.0	0.74
	$\vdash$	3.04	0.59	2.77	0.37	50.39	0.02	0.24	0.01	0.11	0.07
		65.88	8.77	17.16	0.01	0.16	17.89	16.68	0.01	0.16	0.00
		3.31	0.21	27.1	1.11	32.34	1.53	25.11	2.39	90.0	0.01
	+	31.52	49.85	3.67	0.00	62.91	8.96	0.07	00.0	0.00	0.0
	Н	31.62	72.06	0.08	10.86	45.24	15.10	0.22	0.28	3.86	10.72
Н	Н	4.70	0.36	0.90	0.40	4.67	3.02	1.31	0.08	0.16	0.14
Median/animal	5.45			0.45			2.51			0.13	

National    Dose:	200 mg/kg/	day (x2)				2 1221 2		-					
1.	I=		6524			6521			6522			6525	
Color   Colo	de No. BC-07-		224 B	224 C	225 A	225 B	225 C	226 A	226 B	226 C		227 B	227 C
Color   Colo	de BC-07-13	11	J2	J3	ပ	C2	ຮ	L1	L2	F3	R1	R2	R3
Column   C	e No. BC-07-13	J1.xls	J2.xls			C2.xls		L1.xls	L2.xls		R1.xls	R2.xds	R3.xls
1,100, 1,100,	of cell	IJ	ive I ailMom	L-1	-	ive TailMome	Ļ.I		ve l ailMome			iveTailMome	L-I
1,4,4   0.05	<b>-</b>	0.00	9.37	0.20	0.01	0.79	0.04	9.71	5.03	0.23	0.00	1.30	2.14
Control   Cont	3 5	14.41	0.01	40.0	0.03	0.13	0.45	15.47	0.14	0.07	0.01	0000	10 34
0.25         0.06         0.05 <th< td=""><td>4</td><td>6.71</td><td>0.05</td><td>0.01</td><td>0.02</td><td>1.20</td><td>0.53</td><td>7.33</td><td>0.02</td><td>0.19</td><td>15.89</td><td>101</td><td>1.86</td></th<>	4	6.71	0.05	0.01	0.02	1.20	0.53	7.33	0.02	0.19	15.89	101	1.86
O   O   O   O   O   O   O   O   O   O	-sa	0.35	90'0	0.45	0.19	0.19	1.69	0.31	22.21	06.0	0.00	4.46	17.84
124   0.05   0	9	0.21	0.18	0.03	1.99	0.35	60.0	1.66	2.27	6.22	0.26	0.07	0.05
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	~	0.00	0.18	2.25	6.21	0.00	1.62	0.18	0.04	0.71	1.04	0.01	3.41
67.4         0.53         3.10         0.65         0.50         0.11         0.52         0.11         0.52         0.13         0.00 <th< td=""><td>ω (</td><td>1.24</td><td>0.03</td><td>4.31</td><td>0.00</td><td>0.05</td><td>0.89</td><td>0.29</td><td>0.00</td><td>1.55</td><td>0.21</td><td>0.15</td><td>3.29</td></th<>	ω (	1.24	0.03	4.31	0.00	0.05	0.89	0.29	0.00	1.55	0.21	0.15	3.29
0.05         2.56         0.16         0.17         0.05         2.78         0.34         0.51         0.55         0.05 <th< td=""><td>D Ç</td><td>2.14</td><td>0.33</td><td>0.01</td><td>0.13</td><td>00.5</td><td>0.00</td><td>1.72</td><td>2.43</td><td>1.24</td><td>0.59</td><td>0.08</td><td>67.0</td></th<>	D Ç	2.14	0.33	0.01	0.13	00.5	0.00	1.72	2.43	1.24	0.59	0.08	67.0
0.28         6.27         0.08         0.07         0.02         0.04         0.07         0.08         0.04         0.07         0.08         0.04         0.07         0.08         0.04         0.07         0.08         0.09         0.08         0.09 <th< td=""><td>5 =</td><td>0.74</td><td>2.04</td><td>0.16</td><td>0.12</td><td>0.00</td><td>0.00</td><td>2.78</td><td>0.34</td><td>0.32</td><td>32.04</td><td>20.00</td><td>88</td></th<>	5 =	0.74	2.04	0.16	0.12	0.00	0.00	2.78	0.34	0.32	32.04	20.00	88
0.00         0.00         0.01         0.00         0.07         0.08         0.07         0.04         0.07         0.08         0.07         0.08         0.07         0.08         0.09         0.07         0.09         0.07         0.09         0.07         0.09         0.07         0.04         0.09         0.07         0.09         0.07         0.07         0.08         0.07         0.07         0.08         0.07 <th< td=""><td>12</td><td>0.28</td><td>6.27</td><td>0.00</td><td>0.01</td><td>0.17</td><td>0.04</td><td>0.20</td><td>0.70</td><td>0.23</td><td>0.24</td><td>0.61</td><td>2 67</td></th<>	12	0.28	6.27	0.00	0.01	0.17	0.04	0.20	0.70	0.23	0.24	0.61	2 67
0.76         0.05         0.00         0.17         6.09         0.07         0.17         6.09         0.09         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.02         0.01         0.02         0.03 <th< td=""><td>13</td><td>00.00</td><td>0.09</td><td>0.01</td><td>0.00</td><td>0.01</td><td>90.0</td><td>0.27</td><td>0.82</td><td>9.76</td><td>6.41</td><td>0.44</td><td>15.21</td></th<>	13	00.00	0.09	0.01	0.00	0.01	90.0	0.27	0.82	9.76	6.41	0.44	15.21
1.85   3.78   0.023   28.25   0.000   0.01   0.005   0.014   0.025   0.002   0.007   0.005	14	0.76	0.58	0.00	0.12	0.00	0.17	00.9	2.18	60'9	0.00	0.85	0.41
6.28         0.12         0.00 <th< td=""><td>15</td><td>1.63</td><td>3.78</td><td>0.23</td><td>28.25</td><td>0.00</td><td>0.01</td><td>5.86</td><td>19.48</td><td>0.33</td><td>0.02</td><td>0.77</td><td>4.29</td></th<>	15	1.63	3.78	0.23	28.25	0.00	0.01	5.86	19.48	0.33	0.02	0.77	4.29
0.06         0.10         1.41         1.52         0.71         0.05 <th< td=""><td>9 1</td><td>908</td><td>0.22</td><td>0.00</td><td>0.0</td><td>0.0</td><td>00.0</td><td>0.00</td><td>0.13</td><td>0.00</td><td>36</td><td>0.03</td><td>9 0</td></th<>	9 1	908	0.22	0.00	0.0	0.0	00.0	0.00	0.13	0.00	36	0.03	9 0
0.02         0.04         0.05         0.04         0.05         0.04         0.05 <th< td=""><td>- 82</td><td>90.0</td><td>0.10</td><td>141</td><td>1.52</td><td>0.41</td><td>0.03</td><td>25.00</td><td>5.68</td><td>0.11</td><td>0.02</td><td>0.32</td><td>1.35</td></th<>	- 82	90.0	0.10	141	1.52	0.41	0.03	25.00	5.68	0.11	0.02	0.32	1.35
0.02         38.65         1.28         0.61         1.64         0.62         0.00         0.02         6.15         0.03         0.05 <t< td=""><td>19</td><td>0.11</td><td>0.02</td><td>0.00</td><td>0.01</td><td>0.27</td><td>7.30</td><td>0.05</td><td>0.02</td><td>0.44</td><td>2.11</td><td>0.12</td><td>0.00</td></t<>	19	0.11	0.02	0.00	0.01	0.27	7.30	0.05	0.02	0.44	2.11	0.12	0.00
0.00         1/2.16         0.19         0.02         0.00         22.10         0.00         22.10         0.00         22.10         0.00         22.10         0.00         22.10         0.00         22.10         0.00         0.05	20	0.02	38.65	1.28	0.61	1.64	0.52	0.00	0.12	6.15	0.03	0.05	80'0
0.25         0.15         0.24         0.01         0.02         0.00         5.06         0.02         0.01         0.01         0.02         0.02         0.02         0.02         0.02         0.02         0.02         0.02         0.02         0.02         0.02         0.02         0.02         0.02         0.02         0.02         0.03         0.03         0.03         0.04 <th< td=""><td>21</td><td>0.00</td><td>12.16</td><td>0.19</td><td>0.52</td><td>000</td><td>0.24</td><td>00.00</td><td>4.35</td><td>17.75</td><td>2.97</td><td>24.99</td><td>1.16</td></th<>	21	0.00	12.16	0.19	0.52	000	0.24	00.00	4.35	17.75	2.97	24.99	1.16
0.01         0.32         0.00         11.54         2.01         1.61         0.64         16.74         0.01           1.44         0.13         0.26         0.00         0.16         1.89         2.01         4.46         13.06         1.81         12.77           0.01         0.45         0.026         0.00         0.01         0.01         0.01         0.01         0.01           0.15         0.01         0.02         0.01         0.01         0.02         0.01         0.02         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.02         0.01         0.02         0.01         0.02         0.01         0.02         0.01         0.02         0.01         0.02         0.01         0.02         0.01         0.02         0.01         0.02         0.01         0.02         0.01         0.02         0.01         0.02         0.02         0.01         0.02         0.01         0.02         0.01         0.02         0.01         0.02         0.01         0.02         0.02         0.01         0.02         0.02         0.02         0.02         0.02         0.02         0.02         0.02         0.02         0.0	23	0.29	0.18	0.41	0.0	5 69	0.00	5.06	2.02	13.76	170	0.02	21.34
144         013         026         006         016         189         201         446         1306         181         1277           0.01         0.04         0.05         0.01         0.05         0.01         0.05         0.07         0.06         0.07         0.06         0.07         0.06         0.07         0.06         0.07         0.06         0.07         0.06         0.07         0.06         0.07         0.06         0.07         0.06         0.07         0.06         0.07         0.06         0.07         0.06         0.07         0.00         0.01         0.00         0.01         0.00         0.01         0.00         0.01         0.02         0.06         0.01         0.00	24	0.01	0.32	00.00	11.54	2.01	1,81	3.12	1,61	0.64	16.74	0.71	000
0.01         0.45         0.75         0.01         0.01         0.21         0.01         0.01         0.034         1.93           0.15         0.11         0.03         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.02         0.01         0.02         0.01         0.02         0.01         0.02         0.01         0.02         0.01         0.02         0.01         0.01         0.02         0.01         0.02         0.01         0.01         0.02         0.02         0.01         0.02         0.02         0.02         0	25	4.	0.13	0.26	0.08	0.16	1.89	2.01	4.46	13.06	1.81	12.77	4.07
0.15         0.11         0.03         0.02         0.01         2.15         0.27         15.4         1.29         0.00         0.01           0.15         0.11         0.02         0.01         2.15         0.27         1.24         1.29         0.00         0.01           0.22         1.28         0.01         0.00         0.06         3.78         2.89         0.01         0.00<	<b>5</b> 9	0.01	0.45	0.75	0.01	0.01	0.83	3.71	0.21	0.01	934	1.93	1.36
0.12         0.25         0.26         0.15         0.15         0.15         0.00         0.00           0.12         0.25         1.26         1.81         0.00         0.03         3.36         2.18         0.01         0.00         0.	77	0.13	0.0	0.03	0.02	0.0	1.56	0.27	16.24	1.29	0.00	0.11	0.00
0.07         0.29         0.64         0.10         0.23         3.36         2.89         1.08         32.89         3.11         0.00           0.20         0.09         0.53         0.00         0.04         0.14         4.20         0.23         0.18         0.00         0.70           0.00         0.03         0.00         0.05         0.00         0.08         0.04         0.07         0.08         5.77         0.00           0.00         0.03         0.00         0.06         0.00         0.08         0.04         0.00         0.07         0.00 <td>20</td> <td>0.00</td> <td>1 29</td> <td>- A</td> <td>000</td> <td>000</td> <td>3.78</td> <td>0.62</td> <td>4.18</td> <td>0.07</td> <td>0.00</td> <td>0.00</td> <td>21.72</td>	20	0.00	1 29	- A	000	000	3.78	0.62	4.18	0.07	0.00	0.00	21.72
0 20         0 09         5.39         0 00         0 43         114         4 20         0 23         0 18         0 00         0 70           0 002         0 033         0 030         0 030         0 030         0 03         0 03         0 03         0 00 <t< td=""><td>30</td><td>0.01</td><td>0.29</td><td>0.84</td><td>0.10</td><td>0.23</td><td>3.36</td><td>2.89</td><td>1.08</td><td>32.89</td><td>3.11</td><td>0.00</td><td>1.06</td></t<>	30	0.01	0.29	0.84	0.10	0.23	3.36	2.89	1.08	32.89	3.11	0.00	1.06
0.02         0.00         0.13         0.00         0.05         0.00         1.23         0.00         1.23         0.00         1.23         0.00         1.23         0.00         1.23         0.00         1.23         0.00         1.23         0.00         1.23         0.00         1.23         0.00         1.23         0.00         1.23         0.00         0.00         1.23         0.00         1.23         0.00         0.00         1.23         0.00         1.23         0.00         0.00         0.00         0.00         1.23         0.00 <th< td=""><td>31</td><td>0 20</td><td>60'0</td><td>5,39</td><td>0.00</td><td>0.43</td><td>1.14</td><td>4.20</td><td>0.23</td><td>0.18</td><td>0.00</td><td>0.70</td><td>1.99</td></th<>	31	0 20	60'0	5,39	0.00	0.43	1.14	4.20	0.23	0.18	0.00	0.70	1.99
0.00         0.03         0.00         0.00         0.08         0.04         0.00         9.67         2.47         12.99           0.00         0.00         0.00         0.00         0.00         0.00         9.67         0.24         1.29           0.00         0.00         0.03         0.06         0.03         0.06         0.07         0.07         0.07           0.04         0.12         0.06         0.03         0.06         0.00         0.00         0.07         0.07         0.07         0.00 <td>32</td> <td>0.02</td> <td>0.00</td> <td>0.13</td> <td>0.00</td> <td>0.05</td> <td>00.0</td> <td>3.32</td> <td>1.27</td> <td>0.08</td> <td>5.77</td> <td>00'0</td> <td>1.99</td>	32	0.02	0.00	0.13	0.00	0.05	00.0	3.32	1.27	0.08	5.77	00'0	1.99
0.04         0.08         1.80         0.08         1.40         2.50         1.40         2.50         1.40         0.09         1.40         0.09         1.40         0.09         0.04         0.01         0.04         0.04         0.04         0.05         0.04         0.07         0.05         1.37         0.07           0.04         0.12         0.03         0.06         0.06         0.06         0.06         0.07         0.05         1.11         3.81         0.03           0.74         0.03         1.857         0.70         0.05         0.00         0.06         0.06         0.06         0.07         0.03         0.01         0.03         0.01         0.03         0.01         0.07         0.05         0.01         0.07         0.05         0.01         0.07         0.05         0.06         0.06         0.06         0.07         0.07         0.06         0.06         0.05         0.01         0.07         0.07         0.06         0.00         0.06         0.03         0.13         0.14         0.07         0.05         0.02         0.01         0.13         0.14         0.07         0.05         0.02         0.13         0.13         0.14         0.17	23	0.00	0.03	0.33	0.00	0.00	0.88	20.04	0.00	9.67	2.47	12.99	0.30
0.04         0.12         0.44         0.13         0.081         0.49         0.00         0.00         0.00         0.05         0.05         13.72           0.27         0.14         0.08         0.22         0.30         0.05         9.40         0.43         1.11         3.81         0.03           0.27         0.04         0.08         0.022         0.30         0.00         0.00         0.64         0.03         0.01           0.01         7.37         0.00         2.82         1.54         0.02         0.12         0.33         6.11         0.33         0.01           0.01         0.04         0.07         0.06         0.02         0.12         0.03         0.01         0.07         0.05         0.01         0.07         0.07         0.07         0.06         0.02         0.13         0.11         0.07         0.07         0.05 <td>35.</td> <td>500</td> <td>88.0</td> <td>180</td> <td>000</td> <td>900</td> <td>1 43</td> <td>26.50</td> <td>2.5</td> <td>0.0</td> <td>300</td> <td>700</td> <td>4 83</td>	35.	500	88.0	180	000	900	1 43	26.50	2.5	0.0	300	700	4 83
0.27         0.14         0.08         0.22         0.30         0.05         940         0.43         1.11         3.81         0.03           0.74         0.03         18.57         0.06         1.56         0.00         18.68         0.04         0.03         6.17           0.74         0.07         0.82         1.54         0.02         0.02         0.07         1.89         4.28         0.31         6.17           4.76         0.70         0.07         0.58         0.04         0.02         0.04         0.03         0.04         0.07         0.05         0.04         0.07         0.05         0.04         0.07         0.05 <td>36</td> <td>0.04</td> <td>0.12</td> <td>0.44</td> <td>0.13</td> <td>0.81</td> <td>0.49</td> <td>0.00</td> <td>0.00</td> <td>0.67</td> <td>0.52</td> <td>13.72</td> <td>0.11</td>	36	0.04	0.12	0.44	0.13	0.81	0.49	0.00	0.00	0.67	0.52	13.72	0.11
0.74         0.03         18.57         0.06         0.00         0.08         26.42         0.03         6.11           0.01         7.37         0.00         2.82         1.54         0.00         4.07         4.25         4.98         0.01           5.83         0.04         0.07         0.68         0.02         4.07         8.24         1.11         4.38         0.07           0.16         0.26         1.01         0.01         2.680         0.45         0.63         0.15         0.16         0.07           0.17         0.01         0.83         0.04         0.00         0.06         0.58         1.26         0.36         0.16         0.17           0.07         0.03         0.09         2.02         0.60         1.29         0.17         0.34         0.17         0.77           0.01         0.02         0.03         0.02         0.05         0.06         0.58         0.17         0.01         0.07           0.11         0.12         0.09         0.26         0.30         0.01         0.24         0.01         0.01         0.77         0.00         0.01         0.01         0.01         0.01         0.01	37	0.27	0.14	0.08	0.22	0.30	0.05	9.40	0.43	1.11	3.81	0.03	0.09
5.01         7.37         0.00         2.82         1.34         0.12         4.29         4.29         0.31           0.16         0.26         0.01         0.06         0.06         0.05         0.13         0.15         0.17         0.07           0.17         0.26         0.07         0.06         0.06         0.06         0.05         0.17         0.01         0.07         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00<	88	0.74	0.03	18.57	0.76	0.00	0.00	18.68	0.08	26.42	0.33	6.11	1.01
0.16         0.26         1.01         0.01         26.80         0.45         0.63         0.13         0.15         0.76         0.37           4.76         0.26         0.26         0.63         0.13         0.15         0.16         0.37         0.02         0.82         0.03         0.15         0.56         2.52         0.82         0.03         0.04         0.00         0.06         0.56         0.56         0.56         0.52         0.82         0.01         0.77         0.07         0.77         0.07         0.77         0.07         0.77         0.07         0.77         0.07         0.77         0.07         0.78         0.00         0.09         0.00         0.00         0.07         0.07         0.77         0.07         0.77         0.00         0.07         0.77         0.00         0.07         0.78         0.00         0	39	5 83	1.3/	0.00	7.07	90.0	0.02	0.12	9.08	4.25	88.4	0.31	0.27
4.76         0.70         0.83         0.04         0.00         0.06         0.58         15.76         0.56         2.52         0.02           0.17         0.01         0.72         0.04         0.02         6.49         0.51         0.56         0.38         1.16         0.17           0.07         0.02         0.03         2.02         0.60         1.38         0.01         0.17         0.07           0.00         0.02         0.76         0.39         0.26         0.09         0.29         0.01         0.01           1.10.2         0.03         0.47         0.43         0.01         0.74         0.26         0.29         0.26         4.81           1.10.5         0.01         42.34         0.01         0.13         0.01         0.00         0.09         4.81           0.02         0.00         0.01         0.01         0.01         0.01         0.00         0.09         4.81           1.10.5         0.00         0.01         0.01         0.01         0.00         0.00         0.00         0.00           0.00         0.01         0.01         0.01         0.01         0.00         0.00         0.00	41	0.16	0.26	1.01	0.01	26.80	0.45	0.63	0.13	0.15	0.16	0.37	0.29
0.17         0.01         0.72         0.04         0.02         6.49         0.51         0.26         0.38         1.16         0.17           0.07         0.03         0.03         0.02         0.60         1.38         0.01         0.37         0.71         0.71         0.77         0.77         0.77         0.77         0.77         0.77         0.77         0.01         0.77         0.26         0.78         0.01         0.77         0.77         0.78         0.78         0.01         0.77         0.26         0.07         0.26         0.07         0.26         0.07         0.26         4.81         0.26         0.00         0.78         0.00         0.78         0.00         0.78         0.00         0.78         0.79         0.79         0.79         0.79         0.70         0.79         0.70         0.79         0.70         0.70         0.79         0.70         0.	42	4.76	0.70	0.83	0.04	0.00	90.0	0.58	15.76	0.56	2.52	0.82	2:32
0.17         0.01         0.02         0.03         0.09         2.02         0.00         1.28         0.17         0.17         0.34         0.17         0.17           0.11         0.02         0.78         0.29         0.29         0.29         0.26         0.64           1.02         0.01         0.17         0.29         0.01         0.07         2.204         0.07         0.20         0.09         4.81           2.61         0.01         0.21         0.01         0.77         2.204         0.00         0.79         0.09         4.81           1.65         0.00         0.00         0.00         0.70         0.00         0.00         0.79         0.09         4.81           0.04         0.07         0.07         0.07         0.00         0.00         0.00         0.00         0.00           0.04         0.07         0.07         0.28         0.02         1.10         0.60         0.00         0.00           0.20         0.18         0.30         0.10         0.18         0.41         0.50         0.60         0.00           0.21         0.21         0.28         0.22         0.00         0.60 <td< td=""><td>43</td><td>0.17</td><td>0.01</td><td>0.72</td><td>0.0</td><td>0.02</td><td>6.49</td><td>0.51</td><td>0.26</td><td>0.38</td><td>1.16</td><td>0.17</td><td>0.00</td></td<>	43	0.17	0.01	0.72	0.0	0.02	6.49	0.51	0.26	0.38	1.16	0.17	0.00
0.11         0.12         0.19         0.31         0.54         3.57         0.01         2.78         0.29         0.26         8.64           11.02         0.03         0.47         0.43         0.01         0.77         22.04         0.37         0.00         0.96         4.81           1.65         0.01         42.34         0.01         0.71         1.05         0.00         0.79         1.01         0.53           1.65         0.04         0.44         0.79         0.71         5.85         4.39         6.02         1.16         6.41         0.96         0.00           0.20         0.18         0.30         0.10         0.18         0.47         1.52         1.10         0.60         0.61         0.41           0.21         0.21         0.21         0.28         0.47         1.52         1.10         0.65         0.41         0.60	44	) C.O.O.	0.00	0.03	0.09	2.02	0.60	1.29	0.1	0.34	0.71	0.77	2.3
11.02         0.03         0.47         0.43         0.01         0.77         22.04         0.37         0.00         0.56         4.81           2.61         0.01         42.34         0.01         0.13         1.05         0.00         0.79         1.01         0.53           0.04         0.04         0.07         0.71         5.85         0.23         2.128         7.36         0.00         0.00           0.04         0.04         0.79         0.71         0.78         0.02         1.16         6.41         0.96         0.00           0.20         0.18         0.30         0.10         0.18         0.47         1.52         1.10         0.60         0.65         0.41           0.21         0.21         0.28         0.08         0.80         0.60         0.60         0.60	94	0.11	0.12	0.19	0.31	0.54	3,57	0.01	2.78	0,29	0.26	20.0	0.05
2.61         0.01         42.34         0.01         0.13         1.05         0.00         0.00         0.79         1.01         0.53           1.65         0.00         0.071         5.85         4.39         6.23         21.28         7.36         0.06         0.00           0.04         0.71         5.85         0.23         1.16         6.41         0.96         0.00           0.20         0.18         0.30         0.10         0.18         0.47         1.52         1.10         0.60         0.61           0.21         0.21         0.28         0.047         0.80         0.80         0.60         0.60	47	11.02	0.03	0.47	0.43	0.01	0.77	22.04	0.37	0.00	96.0	4.81	0.00
11,85   0.00   0.00   0.71   5.85   4.39   6.23   21,28   7.36   0.00	48	2.61	0.01	42.34	0.01	0.13	1.05	0.00	0.00	0.79	1.01	0.53	4.87
0.20         0.44         0.30         0.40         0.45         0.45         0.02         0.10         0.10         0.18         0.47         1.52         1.10         0.60         0.65         0.41           0.21         0.21         0.18         0.18         0.47         0.80         0.60         0.60	49	11.65	000	0.00	0.71	5.85	4.39	6.23	21.28	7.36	0.86	0.00	1.08
0.21 0.30 0.18 0.31 0.80 0.60 0.60	OC DO	300	0.44	0.79	0.07	0.40	0.20	4 53	2,	400	0.90	00.00	70.0
0.21	Medialization	0.20	2 2	0.30	0.10	0.0	7.5	1.32	2 6	0.00	0.03	4.0	5
	wedian/anima)	_	0.21			×			5				

Animal N°	100 mg/kg/day (xz)	6527			6253			6526			6530	
Slide No. BC-07-	228 A	228 B	228 C	229 A	229 B	229 C	230 A	230 B	230 C	231 A	231 B	231 C
Code BC-07-13	_	12	13	P1	P2	P3	M1	M2	M3	H1	H2	£
File No. BC-07-13	11.xls	12.xls	l3.xls	P1.xls	P2.xfs	P3.xls	M1.xls	M2.xls	M3.xls	H1.xls	H2.xls	H3.xls
No. of cell		OliveTailMom		- 1	OliveTailMomen	L		Olive LailMomen			OliveTailMomen	L
	0.51	0.01	6.01	0.12	0.01	19.28	0.35	2.07	0.45	1.30	69'0	0.10
2	000	0.46	4.86	2.83	10.26	1.83	5.31	0.61	1.85	0.49	17.90	0.33
20	CS. 7	1.38	0.02	205	3.38	3.40	4 80	0.23	0.03	1.21	4.24	0.31
<b>+</b> 1.0	1.46	0.53	20.40	500	458	0.73	98.0	000	170	20.	4.25	4 68
9	21.82	1.47	0.11	0.33	0.44	0.04	0.24	0.20	6.44	2.02	16.29	10.51
7	0.14	3.51	0.00	0.70	23.09	1.09	0.31	0.29	0.92	0.67	2.79	2.38
œ	0.64	0.02	1.07	0.57	0.92	17.00	0.36	1.98	60'0	2.74	2.19	0.4
6	0.09	0.08	0.47	0.48	10.12	0.83	1.14	2.30	17.25	0.34	0.42	1.27
9	0.73	0.04	4.30	0.56	90.9	0.43	12.39	0.38	4.79	0.17	10.43	1.87
=	0.88	0.10	0.36	0.13	5.54	2.57	0.69	0.84	16.50	0.12	0.35	7.83
12	1.19	1.83	0.32	5.21	0.91	0.06	4.41	1.53	3.43	9.23	0.16	9.21
13	0.28	18.33	9.14	1.32	0.28	0.45	2.24	1.07	0.01	2.29	0.66	17.11
4 ú	60.0	000	15.00	2.10	15.26	9.00	0.43	0.37	23.54	17.0	0.27	00.00
5	6.63	3.47	1.59	1.42	13.45	0.00	0.00	14 47	000	3.65	0.70	0.47
17	1.98	0.54	1.19	0.16	1.79	0.43	6.77	0.43	00'0	3.28	12.82	2.14
18	0.47	0.77	0.40	0.04	3.55	3.53	4.66	0.39	20.47	0.59	0.12	0.08
19	4.41	4.13	2.41	0.54	0.66	0.22	0.21	1.17	16.72	0.53	90'0	25.01
20	0.07	21.14	0.01	3.01	12.03	0.86	11.61	0.02	0.04	0.85	0.15	0.01
21	20.55	12.28	1.01	0.20	0.41	2.62	2.65	0.38	0.04	2.30	1.25	6.85
22	0.60	0.31	30.19	0.07	1.50	40.93	3.65	2.26	0.23	4.00	1.70	1.13
37	0.50	87.0	34.00	9.07	1.00	9.74	0.10	240	2.00	88.0	10 32	1.24
25	0.09	0.48	5.04	0.74	1 70	13.4	4.85	142	4.40	918	1010	0.66
26	0.03	4.81	0.52	0.37	3.70	0.39	5.03	0.42	9.73	0.29	0.95	2.19
27	1.81	1.82	0.50	4.80	0.74	1.48	11.31	0.51	06.0	2.39	1.17	0.00
58	0.17	3.42	1.21	8.48	0.73	1.92	0.78	0.01	14.59	2.19	0.74	7.20
62	0.93	0.28	0.17	1.10	4.32	7.57	62.0	16.40	1.70	0.01	3.18	20.34
25	3.48	0.00	0.22	0.07	4.0	4.0	31.80	0.00	12.07	6.13	0.17	20.0
30	0.48	4.72	900	0.20	2.00	1.32	9.04	6 12	77.	2,000	0.70	1.20
33	0.01	3.29	0.04	06.0	6.88	0.52	205	0.02	0.08	13.61	3.77	0.28
34	9.15	0.17	1.06	2.64	19:	1.58	0.13	0.01	0.35	28.93	2.78	0.28
35	0.73	1.58	4.71	17.34	11.36	21.94	0.11	0.07	4.08	0.84	0.00	2.60
36	0.83	1.06	10.63	15.11	4.94	1.91	0.67	0.27	2.18	0.54	0.70	8.69
3/	10.73	1.36	0.29	3.02	38.26	759.7	13.82	40.0	1.38	0.00	0.23	0.07
900	11 02	37.88	0.92	1.07	9.14	1 12	9.5	3 60	000	3.07	200	19.07
40	8.34	0.17	60.0	2.08	42.57	43.29	2.05	1.07	1.53	0.13	136	14.20
41	1.45	0.34	4.80	0.25	1.33	0.74	15.94	7.70	0.36	0.68	0.08	8.53
42	0.23	2.60	0.01	23.19	10.07	0.67	0.34	1.67	0.57	3.75	0.47	1.39
43	0.19	1.52	10.23	1.16	3.93	2.68	0.03	1.83	2.67	45.76	0.45	1.83
4	90.0	3.00	0.52	10.32	17.05	0.13	200	0.23	25.19	0.12	3.37	0.96
46	3.62	1.61	3.54	2.08	0.28	26.45	00.0	0.38	0.18	1.76	4.76	9.6
47	1.68	0.70	2.38	0.36	1.03	2.65	5.99	0.69	0.17	0.17	0.03	3.15
48	0.56	0.17	0.51	0.27	0.55	6.58	2.11	9.23	23.63	1.31	3.13	8.65
49	0.64	4.39	0.55	3.02	0.56	0.69	8.62	0.93	8.90	1.45	0.20	5.18
20	0.42	1.12	2.07	0.81	2.17	14 17	1.92	0.34	0.57	21.30	1.83	3.37
Median/stide	0.30 0.30	27.	0.33	و د	7.41	1.53	9	90.0	9	2	0.75	9/.
	-	200			0 / V			4.43			ķ	1

Code BC-07-13	Jide No. BC-07- code BC-07-13 lie No. BC-07-13		9224			6532			6531	
A1 above rainforment         A245         A345         F148         F248         F348         IVIAN           A1 abs         A1 abs         A548         F148         F248         F348         IVIAN           1569         27.80         8.97         34.38         42.87         10.55         1.71           1545         2.82         1.00         2.64         0.65         44.38         1.51           2.16         1.00         2.64         0.65         44.38         0.65         1.50           2.16         1.00         2.64         0.65         44.38         0.65         1.50           2.16         1.00         2.64         0.65         44.34         0.65         1.50           2.16         1.00         2.64         0.65         43.44         0.65         1.50         1.50           2.16         1.00         2.64         0.65         43.44         0.65         43.44         0.65         1.50         1.50         1.50         1.50         1.50         1.50         1.50         1.50         1.50         1.50         1.50         1.50         1.50         1.50         1.50         1.50         1.50         1.50         1.50	ode BC-07-13	217 A	217 B	217 C	218 A	218 B	218 C	219 A	219 B	219 C
A1.48         A2.48         F1.48         F1.48         F3.48         N1.48           13.69         27.00         14.38         11.25         0.78         10.78         10.78           13.69         22.36         20.01         14.11         0.26         43.44         55.43         0.98           15.45         22.36         1.00         2.64         0.65         45.34         55.43         0.98           15.45         2.16         1.00         2.64         0.65         45.44         55.43         0.98           15.45         3.28         1.00         2.67         0.02         0.79         0.99           15.76         19.01         2.264         4.38         9.46         2.59         1.57           15.66         19.02         1.02         0.02         0.79         1.41         0.02         0.79         1.54         0.98         1.54         0.54         0.98         1.54         0.98         1.54         0.98         1.54         0.98         1.54         0.98         1.54         0.98         1.54         0.98         1.54         0.98         1.54         0.98         1.54         0.74         0.98         0.98         0.78	le No. BC-07-13		A2	- 1		F2			N2	
13.69	~ ~ ~		A2.xls			F2.xls	ŀ		N2.xls	N3.xls
13.69         27.00         8.9         43.8         42.8         10.5         10.5         10.5         10.6 <t< td=""><td>o ol cell</td><td></td><td>ve i allimome</td><td></td><td>L</td><td>ve i alimome</td><td>-1</td><td></td><td>ive i allimome</td><td></td></t<>	o ol cell		ve i allimome		L	ve i alimome	-1		ive i allimome	
88.16         2.36         1.001         2.64         0.05         47.34         1.17           88.16         2.36         1.001         2.64         40.26         47.34         1.17           75.46         36.80         1.002         2.64         40.34         25.43         0.05           38.16         36.80         28.03         20.03         1.002         0.79         0.05           215.76         36.80         28.03         20.03         1.39         1.50         1.54           22.56         36.80         26.70         1.39         1.39         1.50         1.14           22.56         37.80         38.80         3.00         1.57         0.16         0.19           22.57         36.80         3.70         3.80         3.80         1.14         1.14           4.12         37.80         4.65.70         3.80         3.80         1.57         1.14           2.28         6.67         2.33         2.67.90         1.59         3.40         1.14           4.12         3.28         6.79         3.00         4.70         1.29         3.94         1.14           4.12         3.28         3.28	-	13.69	27.00	8.97	34.38	42.87	10.55	0.76	9.98	0.20
75.45         2.240         61.77         2.24         4.344         25.24         0.05           75.45         2.16         61.77         2.26         4.344         25.24         0.05           15.76         36.80         2.80         1.30         3.96         1.87         0.09           15.76         1.26         1.30         3.96         1.87         0.09         1.44           15.76         1.27         1.27         1.27         0.05         3.96         1.87         0.09           1.6.77         1.28         3.01.7         4.18         3.96         1.87         0.09           2.263         6.79         3.01.7         4.38         3.99         1.14         0.14           2.263         6.79         3.01.7         4.38         3.99         1.14         1.14           2.264         2.39         1.66         3.00         5.74         1.14         1.14         1.14           2.27         6.57         3.24         1.84         1.14         1.14         1.14         1.14         1.14           2.28         6.79         3.24         3.23         3.00         4.11         1.14         1.14 <tr< td=""><td>7 6</td><td>38.70</td><td>2,38</td><td>20.07</td><td>7 6.11</td><td>0.25</td><td>11.25</td><td>1.79</td><td>0.78</td><td>0.37</td></tr<>	7 6	38.70	2,38	20.07	7 6.11	0.25	11.25	1.79	0.78	0.37
38.16         38.80         28.03         20.63         19.6         2.67         0.09           12.63         1.60         2.06         1.60         2.67         0.09           12.63         1.60         1.73         0.02         0.78         0.04           12.63         1.60         1.73         0.02         0.78         0.04           12.63         1.60         1.34         2.89         1.89         0.04           1.65         1.60         1.33         3.86         1.60         1.44           1.62         1.60         1.34         3.86         1.89         1.89         1.90         1.44           1.62         1.62         3.00         1.68         3.90         1.67         1.44         1.44         1.45	0 4	75.45	20.20	61.77	0.20	0.05	25.30	0.0	90.6	- N
15.76   15.01   44.72   17.37   0.02   0.03   0.03     2.56   6.79   22.56   1.39   3.56   2.59   1.57     4.12   2.53   6.79   22.56   9.30   1.57     4.12   2.53   6.79   22.56   9.30   1.57     4.12   2.53   6.70   22.56   9.30   1.57     4.12   2.53   6.70   22.56   9.30   1.57     4.12   2.53   6.70   2.33   26.79   5.99   3.48     4.12   2.53   6.70   2.33   2.67   5.99   3.48     4.12   2.53   6.70   2.33   2.67   5.99   3.48     4.12   2.53   6.70   2.32   2.24   1.64     4.12   2.53   6.70   2.32   0.05   3.00     4.13   2.50   0.05   0.05   0.05   3.00     4.14   2.53   6.70   0.00   0.05   3.00     4.15   2.54   2.55   1.00   0.01     4.16   2.50   2.32   0.00   0.00     4.17   2.50   2.50   0.00   0.00     4.18   2.50   2.50   0.00   0.00     4.19   2.50   2.50   0.00     4.10   2.50   2.50   0.00   0.00     4.10   2.50   2.50   0.00   0.00     4.10   2.50   2.50   0.00   0.00     4.10   2.50   2.50   0.00   0.00     4.10   2.50   2.50   0.00   0.00     4.10   2.50   2.50   0.00   0.00     4.10   2.50   2.50   0.00   0.00     4.10   2.50   2.50   0.00   0.00     4.10   2.50   2.50   0.00   0.00     4.10   2.50   2.50   0.00   0.00     4.10   2.50   2.50   0.00   0.00     4.10   2.50   2.50   0.00   0.00     4.10   2.50   2.50   0.00   0.00     4.10   2.50   2.50   0.00   0.00     5.10   2.50   2.50   0.00   0.00     5.10   2.50   2.50   0.00   0.00     5.10   2.50   2.50   0.00   0.00     5.10   2.50   2.50   0.00   0.00     5.10   2.50   2.50   0.00   0.00     5.10   2.50   2.50   0.00   0.00     5.10   2.50   2.50   0.00   0.00     5.10   2.50   2.50   0.00   0.00     5.10   2.50   2.50   0.00   0.00     5.10   2.50   2.50   0.00   0.00     5.10   2.50   2.50   0.00   0.00     5.10   2.50   2.50   0.00   0.00     5.10   2.50   2.50   0.00   0.00     5.10   2.50   2.50   0.00   0.00     5.10   2.50   2.50   0.00   0.00     5.10   2.50   2.50   0.00   0.00     5.10   2.50   2.50   0.00     5.10   2.50   2.50   0.00     5.10   2.50   2.50   0.00     5.10   2.50   2.50   0.00     5.10   2.50   2.50	٠ د	39.16	36.80	28.03	20.63	19.06	2.67	66.0	3.54	6.80
2.2 65         7.24         2.1 66         11.33         3.58         6.55           3.35         6.71         2.1 56         1.9 69         11.32         3.58         1.57           3.35         6.071         2.2 30         1.39         9.30         1.57         0.19           4.12         7.3 88         4.6 57         6.86         9.30         1.57         0.19           4.12         5.2 83         4.6 66         2.33         2.6 79         3.48         0.79           4.12         5.2 83         4.6 66         2.33         2.6 79         3.48         0.79           4.12         5.2 83         6.6 79         3.24 2         1.6 4         1.74         4.14           4.12         7.2 82         2.5 30         2.6 79         3.24 2         1.6 1         1.74         4.14         1.74         4.14         1.74         4.14         1.74         4.15         4.14         1.74         4.14         1.74         4.15         4.14         1.74         4.15         4.14         1.74         4.15         4.14         1.74         4.15         4.14         1.74         4.15         4.16         6.21         6.21         6.21         6.21         <	9	15.76	19.01	41.72	17.37	0.02	0.79	960	4.75	0.0
0.35         6.79         3.017         4.381         9.46         2.99         1.97           3.35         6.79         3.017         4.381         9.46         2.99         1.97           4.19         3.35         6.79         4.65         6.86         9.30         1.67         1.44           7.92         5.200         0.09         0.65         5.89         3.96         1.74           2.68.83         6.79         4.76         0.67         3.39         4.11           2.68.83         6.79         4.76         0.57         3.94         1.74           4.12         7.82         5.20         0.42         0.57         3.33         5.09         4.11           4.12         7.82         5.67         0.42         2.23         6.01         0.01         1.74         1.74           4.12         7.82         5.67         0.42         2.23         6.10         0.02         3.33         0.02         4.11         1.74           4.12         7.82         6.13         0.41         0.43         3.33         0.02         3.34         4.11         1.74           4.12         7.82         6.10         0.41	7	22.63	7.24	21.56	19.69	11.33	3.58	5.55	1.22	0.96
3.35         60.71         22.96         1.39         3.96         1.80         1.44           79.27         3.26         6.07         6.86         9.30         6.572         1.45           79.27         52.00         0.09         0.68         9.00         6.76         0.79           79.27         52.00         0.09         0.68         9.00         6.76         0.79           4.68         8.47         6.579         3.24         1.647         1.287         4.14           5.76         5.514         5.52         2.02         2.63         0.01         4.14           6.00         5.76         5.32         2.67         0.42         2.52         6.01         1.14           4.12         7.382         2.401         3.60         30.39         4.59         4.14         1.14           4.13         2.2         2.61         1.62         3.09         4.00         9.09         4.14         1.14         4.14         4.14         4.14         4.14         4.14         4.14         4.14         4.14         4.14         4.14         4.14         4.14         4.14         4.14         4.14         4.14         4.14         4.14	8	0.35	6.79	30.17	43.81	9.46	2.99	1.97	06.0	3.74
4,19         33.88         46.57         6.86         9.30         1572         1.45           26.83         64.66         2.33         26.79         58.90         57.6         0.19           41.24         25.00         2.33         26.79         36.79         36.79         1.45           41.24         25.37         66.79         32.42         16.47         12.87         4.10           41.24         25.37         66.79         32.42         16.47         12.87         4.10           41.24         25.37         66.79         32.42         16.47         12.87         4.10           41.26         26.12         56.36         0.41         3.33         56.50         3.09           41.86         23.08         21.35         36.29         1.03         0.28         3.09           47.66         42.36         26.57         1.03         5.10         11.09         0.23           47.56         42.36         26.57         1.03         5.21         1.03         0.28           47.56         42.36         27.34         4.15         0.00         0.34         4.51         0.01           47.56         42.30         0.42<	6	3.35	60.71	22.98	1.39	3.96	1.80	1.44	0.95	1.35
26.80         26.80         26.85         30.00         5.76         0.19           26.83         66.79         2.33         26.79         3.00         3.74         0.19           41.24         25.33         66.79         3.24         1.647         1.287         4.11           6.76         8.47         6.579         3.24         1.647         1.287         4.10           6.76         8.47         6.579         3.24         1.647         1.287         4.10           6.76         8.47         6.579         3.24         1.647         1.287         4.10           4.12         7.78         8.47         6.53         0.02         3.09         4.00           4.186         2.206         8.275         1.691         1.03         5.50         3.09           4.186         2.207         8.275         1.691         1.03         3.24         4.10         1.14           4.186         2.208         8.275         1.691         1.03         5.10         0.00           6.284         2.267         1.103         3.33         4.15         4.15         0.00           6.284         2.267         1.003         3.202	9	4.19	33.88	46.57	6.86	9.30	15 72	1.45	4.28	0.16
41.24         2.53         4.76         5.89         3.89         3.89         0.78           41.24         2.53         2.6.79         3.242         1.647         1.287         4.14           5.76         8.47         65.79         32.42         1.647         1.287         4.14           6.76         5.32         6.579         3.242         1.647         1.287         4.14           4.12         7.32         2.610         1.23         6.50         3.09           4.13         2.206         2.135         1.641         1.33         6.50         3.09           4.13         2.206         2.135         1.621         3.24         4.15         0.01           4.13         2.206         2.135         1.041         1.03         3.14         4.14           4.13         2.206         2.135         3.629         1.03         1.04         4.15         0.00           2.206         2.207         3.33         6.50         0.22         1.24         0.10           2.207         4.206         0.207         3.34         4.14         0.00         1.04           2.208         4.206         0.207         3.38	11	79.27	52.00	0 0	0.65	30.00	5.76	0.19	0.62	8.16
41.24         25.35         59.79         34.76         0.57         38.44         4.1.4           6.02         85.74         5.22         0.42         2.32         83.01         0.01           4.12         73.82         5.26         0.42         2.32         83.01         0.01           4.12         77.82         2.66         0.41         3.03         6.50         3.04           4.12         7.72         2.20         8.25         0.42         2.32         83.01         0.01           4.12         7.72         2.20         8.25         0.41         3.03         4.50         0.23           4.18         2.20         8.27         1.03         1.03         0.26         8.09           7.71         4.28         2.25         1.03         1.20         0.20         8.09           4.75         4.26         4.23         1.03         0.02         0.02         0.02         0.00           4.27         4.28         2.65         1.00         39.62         1.00         0.20         0.00           4.29         4.23         4.23         1.00         0.02         2.23         1.41         0.00           <	15	26.83	64.66	2.33	26.79	5.89	34.89	0.79	0.72	3.64
0.02         55.74         55.73         0.24.2         10.47         1.20         4.11           4.12         7.382         54.01         3.60         30.39         45.39         4.00           4.12         7.382         54.01         3.60         30.39         45.39         4.00           4.186         23.08         22.32         45.39         4.00         3.09           4.186         23.08         22.135         16.91         10.33         55.06         3.09           47.56         47.56         25.67         10.33         5.10         10.09         9.26           52.94         25.67         10.03         1.21         10.09         9.26         1.00         9.26           62.94         25.73         36.29         1.03         1.21         10.09         10.09         10.09         10.06         10.00 <td< td=""><td>13</td><td>41.24</td><td>25.33</td><td>56.79</td><td>20.40</td><td>0.57</td><td>39.44</td><td>1./4</td><td>0.71</td><td>0.67</td></td<>	13	41.24	25.33	56.79	20.40	0.57	39.44	1./4	0.71	0.67
4.12         7.32         5.40         3.60         3.00         4.50         6.23         4.50         6.23         4.50         6.23         6.50         6.50         6.50         6.50         6.50         6.50         6.50         6.50         6.50         6.50         6.50         6.50         6.50         6.50         6.50         6.70         1.00         6.50         6.70         1.00         6.70         1.00         6.70         1.00         6.70         1.00         6.70         1.00         6.70         1.00         6.70         1.00         6.70         1.00         6.70         1.00         6.70         1.00         6.70         1.00         6.70         1.00         6.70         1.00         6.70         1.10         6.70         1.10         6.70 <th< td=""><td>4</td><td>0,70</td><td>55.74</td><td>532</td><td>34.42</td><td>9 33</td><td>R2.07</td><td>+</td><td>0.02</td><td>0.00</td></th<>	4	0,70	55.74	532	34.42	9 33	R2.07	+	0.02	0.00
13.92         26.12         56.36         0.41         3.33         55.06         3.09           47.56         42.30         28.275         16.91         19.23         37.46         0.23           47.56         42.36         28.57         10.03         5.10         12.10         10.09           47.56         42.36         28.57         10.03         5.10         12.10         10.09           6.29.4         25.67         11.62         4.02         5.38.1         4.15         0.00           38.68         33.62         1.76         5.27.3         5.38.1         4.61         0.00           1.00         44.01         6.42         0.90         3.62         1.14         0.00           1.01         6.42         0.90         3.62         1.16         4.51         0.20           1.01         6.42         0.90         3.62         1.16         4.51         0.20           1.02         1.11         0.02         4.51         0.20         1.41         0.00           1.02         1.11         0.02         4.23         1.04         0.00         1.11           1.02         1.11         0.02         1.12	16	4.12	73.82	54.01	3.60	30.39	45.39	00.4	000	2.41
4186         23.08         82.75         16.91         19.23         37.46         0.26           47.71         48.88         21.35         36.29         1.03         0.26         8.29           47.56         42.36         2.65         1.03         0.026         8.29           62.94         25.67         11.62         4.00         0.34         4.15         0.00           62.94         25.67         11.62         4.00         0.34         4.15         0.00           90.00         48.34         33.22         0.02         53.81         45.16         0.20           7.27         24.45         15.23         4.12         11.75         23.69         1.40           7.23         16.26         33.61         0.04         40.05         0.66         4.23         10.46           7.23         13.61         0.09         0.89         5.45         0.14         4.14           5.56         13.27         33.61         0.02         32.23         34.3         24.76           6.45         13.7         12.25         16.36         0.14         17.18         17.18           5.56         10.09         0.22         12.22	17	13.92	26.12	58.36	0.41	3,33	55.06	3.09	2.86	0.24
771         48.88         21.35         36.29         1.03         0.26         8.29           47.56         42.36         26.57         1.00         6.10         10.09         6.29           62.34         25.67         1.65         4.00         0.34         4.15         0.00           88.88         33.62         1.76         52.73         53.81         4.61         0.00           90.00         48.34         33.62         1.76         52.73         4.12         1.75         23.69         1.40           7.27         24.45         0.90         39.62         1.36         4.23         10.46         1.10           4.23         7.31         3.16         0.90         0.09         0.09         0.09         0.05         1.40         0.14           4.4.57         3.14         0.40         0.09         0.05         1.11         2.36         0.06         1.14           5.5.6         3.44         3.24         0.09         0.05         1.13         2.44         0.00         0.04         0.05         0.04         0.06         0.04         0.06         0.05         0.04         0.06         0.05         0.06         0.06	9	41.86	23.08	82.75	16.91	19.23	37.46	0 23	3.41	0.00
47.56         42.36         26.57         10.03         5.10         12.10         10.09           28.68         25.67         11.62         4.00         6.34         4.15         0.00           28.68         33.62         1.76         52.73         5.381         4.15         0.00           7.27         24.45         16.22         4.02         5.381         4.516         0.20           7.27         24.45         16.23         4.10         1.20         1.49         1.43           7.23         7.351         33.61         0.04         40.05         0.66         1.11           3.44         0.45         31.27         3.19         28.87         11.85         0.54         0.04           46.37         0.09         39.62         1.06         4.23         1.046         1.11         0.14	19	7.71	48.88	21.35	36.29	1.03	0.26	8.29	1.49	0.0
62.94         25.67         11.62         4.00         0.34         4.15         0.00           98.88         33.62         1.76         5.93         76.19         5.31           0.00         48.34         33.22         0.02         5.38         4.76         0.20           1.27         24.45         15.23         4.12         1.17         23.69         1.49           47.01         6.45         0.36         0.04         40.06         0.66         1.11           7.23         7.351         33.61         0.04         40.06         0.66         1.14           7.23         7.351         6.45         31.01         39.28         0.22         1.222         16.38         0.02           4.45         31.01         39.28         0.22         12.22         16.38         0.01           5.50         65.46         0.09         95.44         17.18         32.23         34.3         24.76           6.45         31.01         39.28         0.22         12.22         16.38         0.02           75.40         0.09         95.44         17.14         4.51         3.43         24.78           55.50         66.53	20	47.56	42.36	26.57	10.03	5.10	12.10	10.09	0.03	0.50
38.86         33.862         1.76         52.73         5.83         76.19         5.31           7.27         24.45         15.22         4.12         53.81         76.19         0.53           7.27         24.45         15.23         4.12         11.75         23.69         1.40           7.23         73.51         33.60         0.99         0.89         5.45         0.06           7.23         73.51         3.19         28.87         11.85         0.54         0.01           3.56         13.27         3.19         0.09         0.09         0.89         5.45         0.01           46.37         27.48         72.40         0.02         32.23         58.14         5.60           55.60         66.48         44.47         9.25         5.11         23.43         2.47           55.60         66.48         44.47         9.25         5.11         23.13         2.14           55.60         66.48         44.47         9.25         5.11         23.14         17.18           56.16         38.74         47.80         0.20         0.51         1.51         0.05           56.16         10.19         0.05	21	62.94	25.67	11.62	4.00	0.34	4.15	0.00	0.61	0.9
7.27         24.6.34         13.2.2         4.0.2         33.0.1         4.2.0         0.20           44.01         6.42         0.90         39.62         1.36         4.23         10.46           44.01         6.42         0.90         39.62         1.36         4.23         10.46           44.01         6.42         0.90         39.62         1.36         4.23         10.46           3.44         0.45         33.61         3.19         28.87         11.85         0.66         1.61           6.45         31.01         32.89         0.09         0.02         32.23         58.14         0.14           6.45         31.01         32.40         0.02         32.23         58.14         0.14           6.55         46.37         27.40         0.02         32.23         58.14         17.13           53.50         6.54         47.44         9.25         5.11         23.43         24.76           66.53         48.56         80.86         12.56         1.34         0.25         38.0           56.16         38.74         47.64         9.28         1.100         32.83         3.6           57         48.86	77	38.68	33.62	33.76	52.73	5.93	/6.19	5.31	9.28	6.5
44.01         6.47.2         0.02.0         39.62         1.17         0.03.0         1.48           7.23         7.351         3.361         0.04         40.05         0.06         4.11           7.23         7.351         3.361         0.04         40.05         0.06         1.11           8.44         0.43         50.32         0.04         40.05         0.06         1.11           8.5.66         13.27         3.101         39.28         0.22         12.22         16.38         0.16           75.49         0.09         95.74         17.13         4.51         2.45         0.02           75.49         0.09         95.74         17.13         4.51         2.34         2.40           66.53         48.56         8.0 8         12.25         1.51         0.05         3.80           56.16         36.74         47.64         0.39         0.51         1.51         0.05           56.16         36.74         4.764         0.73         0.51         1.51         0.76           57.7         4.56         0.59         4.61         2.07         0.76         1.86           5.71         0.36         5.66	57	0.00	48.34	33.22	0.02	53.81	45.10	0.20	0.02	0.0
7.23         73.51         33.61         0.04         40.05         0.66         1.11           35.44         0.43         56.32         0.09         0.89         5.45         0.60           35.44         0.43         36.32         0.09         0.89         5.45         0.10           46.55         13.01         39.26         0.22         12.22         16.38         0.04           46.57         27.48         72.40         0.02         32.23         38.14         24.76           55.50         65.48         44.47         9.25         5.11         23.14         17.18           66.16         38.74         4.74         9.25         5.11         23.14         17.18           56.16         38.74         4.74         9.25         5.11         23.14         17.18           56.16         38.74         4.74         9.25         5.11         23.14         17.18           5.77         0.39         0.51         1.51         0.02         3.80           5.77         0.39         0.64         1.83         2.09         0.39         0.11         2.48           5.77         0.39         0.46         0.00         <	25	44.01	64.43	0.00	30.62	1 96	4 23	10.48	0.97	0.00
3.44         0.43         56.32         0.09         0.69         5.45         0.60           35.56         13.27         3.19         28.87         11.85         0.54         0.14           46.37         27.48         72.40         0.02         32.23         58.14         5.60           46.37         27.48         72.40         0.02         32.23         58.14         5.60           66.53         48.56         80.86         4.11.3         5.11         22.476         27.46           66.53         48.56         80.86         12.56         1.34         0.25         3.80           56.16         38.74         4.76         9.26         1.34         0.25         3.80           56.16         38.74         4.76         9.28         1.34         0.25         3.80           56.1         38.74         4.76         9.28         1.100         22.83         1.80           57.1         0.38         0.05         1.100         22.83         1.88         1.88           57.1         0.38         0.39         0.01         0.29         0.16         1.85           58.6         1.137         5.41         4.14	26	7.23	73.51	33.61	0.04	40.05	0.66	111	1.33	32
35.56         13.27         3.19         28.87         11.85         0.54         0.14           46.37         27.48         0.22         12.22         16.36         0.04           46.37         27.49         0.09         95.74         17.13         4.51         3.43         24.76           55.50         66.46         9.25         1.12.2         16.36         0.02         17.18         24.76           66.53         48.56         80.88         1.25         5.11         2.23.14         17.18         24.76           66.16         38.74         47.64         0.39         0.51         1.51         0.03         0.25         3.80         0.25         3.80         0.29         3.80         0.25         3.80         0.25         3.80         0.25         3.80         0.25         3.80         0.25         3.80         0.25         3.80         0.25         3.80         0.26         2.48         0.00         3.566         1.85         0.26         2.48         0.00         3.566         1.85         0.26         2.48         0.05         2.48         0.05         2.48         0.05         2.48         0.05         2.48         0.88         2.88         2.8	27	3.44	0.43	50.32	60.0	0.89	5.45	0.60	0.04	0.42
6.45         31.01         39.28         0.22         12.22         16.38         0.02           75.49         0.09         95.74         0.02         32.23         56.14         5.60           75.49         0.09         95.74         17.13         24.76         5.60           55.50         65.48         44.77         9.25         5.11         23.14         17.18           56.16         38.74         47.84         0.25         5.11         23.14         17.18           56.16         38.74         47.84         0.05         37.98         46.16         20.73         0.76           5.71         0.39         0.51         1.51         0.07         3.80         0.76           5.71         0.38         0.00         0.51         3.79         46.16         20.73         0.76           5.71         0.38         0.48         0.00         35.66         1.38         2.09         0.39           6.71         0.39         0.48         0.00         35.66         1.38         2.48         0.36         0.36           9.66         1.71         1.08         5.74         2.14         4.19         4.35         0.05	78	35.56	13.27	3.19	28.87	11.85	0.54	0.14	1.24	0.0
46.57         72.48         72.40         0.02         32.23         56.14         5.60           75.49         0.09         95.74         17.13         34.3         24.76           55.50         65.48         44.47         9.25         5.11         23.14         17.18           55.50         65.64         44.47         9.25         5.11         23.14         17.18           56.16         38.74         47.86         12.56         1.34         0.25         3.80           56.16         38.74         47.80         0.05         1.51         0.05         0.51         0.05           58.7         42.80         2.81         2.28         11.00         25.86         1.85           5.71         0.38         0.10         2.28         1.10         25.86         1.86           6.70         0.87         0.20         0.39         0.01         2.26         1.85           5.71         0.38         0.70         0.57         3.78         0.66         3.03           6.485         5.80         11.37         2.41         66.39         0.96         4.85           5.72         2.24         1.49         43.35 <t< td=""><td>59</td><td>6.45</td><td>31.01</td><td>39.28</td><td>0.22</td><td>12.22</td><td>16.38</td><td>0.02</td><td>0.74</td><td>0.47</td></t<>	59	6.45	31.01	39.28	0.22	12.22	16.38	0.02	0.74	0.47
7.549         0.09         95.74         17.13         4.51         3.43         24.76           66.53         48.56         44.44         17.13         4.51         3.43         17.18           66.53         48.56         80.86         12.56         1.34         0.25         3.80           6.16         38.74         47.64         9.38         0.51         1.51         0.03           2.86         10.19         0.05         2.81         2.28         1.100         22.88         0.29           5.71         0.36         5.68         0.48         0.00         35.66         1.85           6.97         17.01         10.89         5.78         2.14         58.26         2.03           9.96         17.01         10.89         5.78         2.14         58.26         2.03           9.80         6.70         0.39         0.11         2.43         0.56         0.66           6.485         5.80         11.37         5.41         41.19         42.35         0.66           6.485         5.80         11.37         5.41         41.19         42.35         0.66           5.120         1.32         3.74 <t< td=""><td>30</td><td>46.37</td><td>27.48</td><td>72.40</td><td>0.02</td><td>32.23</td><td>58.14</td><td>5.60</td><td>7.18</td><td>4.35</td></t<>	30	46.37	27.48	72.40	0.02	32.23	58.14	5.60	7.18	4.35
66.53         48.68         44.47         9.25         5.11         2.53.44         17.18           66.16         38.74         80.08         1.26         0.39         0.25         38.0           56.16         38.74         47.64         0.39         0.51         1.51         0.05           5.87         42.80         2.81         46.16         22.03         0.76           5.77         42.80         2.81         1.00         28.83         0.76           6.77         0.36         56.89         0.48         0.00         26.86         1.85           6.77         0.57         8.11         1.83         2.09         0.39         0.11         2.48           9.86         1.701         10.89         5.76         0.19         66.39         0.06           9.86         1.701         10.89         5.41         41.19         45.35         0.65           9.86         1.73         2.44         41.19         45.35         0.65         0.65           4.75         2.92         37.42         3.72         2.47         0.56         1.89           5.70         4.75         2.92         37.42         37.8         2		75.49	0.09	95.74	17.13	4.51	3,43	24 76	0.47	0.47
66.16         38.74         47.67         67.73         67.74         67.73         67.74         67.74         67.74         67.74         67.74         67.74 <th< td=""><td>32</td><td>23.20</td><td>55.48</td><td>44.47</td><td>9.25</td><td>20.1</td><td>43.14</td><td>81.78</td><td>3.60</td><td>0.49</td></th<>	32	23.20	55.48	44.47	9.25	20.1	43.14	81.78	3.60	0.49
2.86         10.19         0.05         37.38         46.16         20.73         0.05           5.87         42.80         2.81         2.28         11.00         22.83         0.78           5.71         0.38         0.81         1.83         0.09         0.01         2.81         0.29           6.97         0.97         8.17         1.83         2.09         0.09         0.11         2.48           9.96         17.01         10.89         5.78         2.14         58.26         2.03           38.03         6.70         0.57         3.75         2.14         56.39         0.66           64.85         5.80         11.37         5.41         41.19         43.35         0.66           5.120         2.22         2.47         66.39         0.16         0.16         0.16           5.23         1.38         3.75         2.24         0.22         2.43         0.56           51.20         4.90         18.72         35.33         7.38         2.58         0.37           51.20         2.27         4.74         1.00         20.22         2.21         0.37           51.20         2.27         4.74 <td>200</td> <td>66.03</td> <td>26 74</td> <td>47.64</td> <td>0.20</td> <td>40.0</td> <td>1.63</td> <td>3.00</td> <td>90.0</td> <td>0.0</td>	200	66.03	26 74	47.64	0.20	40.0	1.63	3.00	90.0	0.0
5.87         42.80         2.81         2.82         4.0.10         2.83         0.20           5.87         42.80         2.81         2.88         4.8         0.00         25.88         0.10           6.71         0.36         56.68         0.48         0.00         356.66         1.85           1.87         2.08         0.70         0.55         0.39         0.11         2.48           3.8.03         6.70         0.57         3.75         6.19         66.39         0.96           6.48.5         5.80         11.37         5.41         66.39         0.96         0.96           3.28         1.98         14.38         2.85         2.470         6.91         0.16           3.28         1.98         14.38         2.84         2.43         0.65         0.65           51.20         4.75         2.04         47.35         0.25         2.43         0.53           51.20         4.75         2.04         1.738         2.58         0.37           47.57         2.04         4.74         1.49         1.68         0.24           3.607         2.27         2.43         1.00         20.86         0.22 <td>35</td> <td>20.10</td> <td>10.74</td> <td>47.04</td> <td>37.08</td> <td>10.01</td> <td>1,00</td> <td>0.03</td> <td>0.00</td> <td>0 0</td>	35	20.10	10.74	47.04	37.08	10.01	1,00	0.03	0.00	0 0
5.71         0.36         59.68         0.48         0.00         35.66         1.85           0.97         8.11         1.83         2.09         0.39         0.11         2.48           9.96         17.01         10.83         5.76         0.39         0.01         2.48           3.80.3         6.70         0.57         3.75         61.19         66.39         0.96           6.85         5.80         11.37         5.41         41.19         45.35         0.96           6.70         0.57         3.75         61.19         66.39         0.96         0.96           6.70         1.37         2.41         41.19         45.35         0.65         0.65           3.28         1.98         14.82         3.72         24.70         6.91         0.16           47.57         20.49         18.72         2.43         0.55         1.80         0.37           47.57         20.49         18.72         36.32         1.43         1.00         20.86         0.22           47.7         48.09         6.14         1.43         1.00         20.86         0.54           4.7         48.09         6.08         0.20<	36	587	42.80	2.81	27.8	11.00	20.73	0.70	1.50	17.
0.97         8.11         1.83         2.09         0.39         0.11         2.48           8.96         17.01         10.89         5.78         2.14         58.26         2.03           8.96         6.70         0.57         3.74         58.26         0.20         0.65           6.485         5.80         11.37         2.41         66.39         0.96         0.66           3.28         1.38         1.37         2.41         66.39         0.66         0.66           51.20         2.27         24.70         6.91         0.16         0.16         0.65           51.20         2.92         37.42         3.72         24.31         0.65         0.37           47.57         2.04         4.90         18.72         3.53         7.38         2.58         0.37           50.07         2.3.7         4.66         1.66         1.89         0.37         1.89           50.7         2.2.7         4.60         1.83         0.54         0.54         1.89           4.7         4.80         6.04         0.20         1.728         2.2.28         0.54           4.7         4.80         6.04         0.68	37	5.71	0.36	59.68	0.48	00.0	35.66	1.85	0.63	57
9.96         17.01         10.89         5.78         2.14         58.26         2.03           39.03         6.70         0.57         3.75         61.19         66.39         0.96           64.85         5.80         11.38         2.85         24.70         6.91         0.16           3.38         1.98         14.38         2.85         24.70         6.91         0.16           51.20         4.90         18.72         37.2         24.70         6.91         0.16           51.20         4.90         18.74         35.72         0.22         24.31         0.53           47.57         20.42         47.64         11.49         15.68         19.06         1.89           27.86         9.29         36.83         0.54         1.89         0.52         22.88         0.52           4.27         48.09         60.47         0.58         37.61         5.09         0.54           15.10         34.15         3.20         5.24         0.28         0.05           4.27         48.09         6.65         16.05         1.27	38	0.97	8.11	1.83	2.09	0.39	0.11	2.48	8.65	2.45
38.03         6.70         0.57         3.75         6119         66.39         0.96           6.485         5.80         11.37         5.41         66.39         0.96           3.38         1.98         14.38         2.85         24.70         6.91         0.16           3.23         2.92         37.42         3.72         0.22         24.31         0.53           51.20         47.57         20.42         47.64         11.49         15.88         19.06         1.89           36.07         23.27         18.03         61.43         1.00         20.86         0.22           4.27         48.09         36.47         0.58         37.61         5.09         1.458           15.10         34.15         3.20         50.84         2.46         0.54         0.54           15.10         34.15         3.20         50.84         2.46         0.28         0.05           24.73         24.73         5.09         6.65         16.05         1.27	39	96.6	17.01	10.89	5.78	2.14	58.26	2.03	0.05	1.18
64.85         3.80         11.37         2.41         41.19         45.35         0.65           3.28         1.89         14.38         2.47         6.91         0.16           3.23         2.92         37.42         3.72         2.470         6.91         0.16           47.57         20.49         18.72         37.2         2.58         0.37           47.57         20.49         4.87         11.00         2.68         0.37           36.07         2.327         4.80         6.143         1.00         20.86         0.22           4.27         48.09         6.68         0.20         17.28         22.228         0.54           4.27         48.09         6.04         0.58         3.761         5.60         14.68           15.10         34.15         3.20         50.84         2.46         0.28         0.05           24.73         24.73         5.09         6.65         16.05         1.27	40	38.03	6.70	0.57	3.75	61.19	66.39	0.96	0.03	3.00
3.23         2.36         1.89         14.30         3.75         2.77         0.22         24.31         0.53           51.20         4.90         18.72         35.33         7.38         2.58         0.37           47.57         20.42         4.56         11.09         20.86         1.89           36.07         23.27         18.03         61.43         1.00         20.86         0.22           4.27         48.09         6.88         0.20         17.28         22.28         0.54           4.27         48.09         6.04         0.58         37.61         5.60         14.68           15.10         34.15         3.20         50.84         2.46         0.28         0.05           25.22         3.11         3.20         50.84         2.46         0.28         0.06           4.27         4.37         5.09         6.65         1.37         2.02         2.02	14	25.83	2.80	11.37	19.0	41.19	43.35	0.65	0.29	3.9
51.20         4.30         13.42         35.32         0.42         2.43   0.33           51.20         4.90         18.72         35.32         7.38         2.58         0.37           47.57         20.42         47.64         11.49         15.68         19.06         1.89           36.07         23.27         48.03         61.43         1.00         22.86         0.22           4.27         48.09         60.47         0.58         37.61         5.60         14.68           15.10         34.15         3.20         50.84         2.46         0.28         0.05           24.73         24.77         5.09         6.65         16.05         1.27	42	3 23	0.00	37.42	2.79	24.70	0.8	0.50	4.4	2.5
47.57         20.42         47.64         11.49         15.88         19.06         1.89           36.07         23.27         18.03         61.43         1.00         20.86         0.22           37.86         9.29         36.82         0.20         17.28         22.28         0.54           4.27         48.09         60.47         0.58         37.61         5.60         14.68           15.10         34.15         3.20         50.84         2.46         0.28         0.05           24.73         24.73         5.09         6.65         16.05         1.27	44	51.20	7.35	18.72	35.33	7.38	2.4.3	0.33	1 86	7.14
36 07         23.27         18 03         61.43         1.00         20.86         0.22           27.86         9.29         36.82         0.20         17.28         22.28         0.54           4.27         48.09         60.4         37.61         560         14.68           15.10         34.15         3.20         50.84         2.46         0.28         0.06           52.82         3.11         3.50         50.84         5.02         0.06         0.06           24.73         24.89         24.77         5.09         6.65         16.05         1.27	45	47.57	20.42	47.64	11.49	15.68	19.06	1.89	4.53	000
27.86         9.29         36.82         0.20         17.28         22.28         0.54           4.27         48.09         60.47         0.58         37.61         5.60         14.68           15.10         34.15         3.20         50.84         2.46         0.28         0.05           52.82         3.1         3.90         18.03         2.05         12.7           24.73         24.89         24.77         5.09         6.65         16.05         1.27	46	36.07	23.27	18.03	61.43	1.00	20.86	0.22	0.17	0.00
4.27         48.09         60.47         0.58         37.61         5.60         14.68           15.10         34.15         3.20         50.84         2.46         0.28         0.05           52.82         31.1         3.90         5.72         18.03         2.05           24.73         24.89         24.77         5.09         6.65         16.05         1.27	47	27.86	9.29	36.82	0.20	17.28	22.28	0.54	2.00	0.25
15.10 34.15 3.20 50.84 2.46 0.28 0.05 52.82 311 3.90 5.09 6.65 16.05 1.27	48	4.27	48.09	60.47	0.58	37.61	5.60	14.68	2.95	4.58
24.73 24.89 24.77 5.09 6.65 16.05 1.27	48 50	15.10	34.15	3.20	1 87	5.46	0.28	0.05	0.05	3.26
1.27.1 5.1.0.0 5.0.0 5.0.0 1.1.7	Madianfelida	****	27 80	27.77	90,4	200	16.05	**	4.55	
27.50	Modianianimal	24.72	200.10	, ,	3,03	0.00	0.03	77.	77.	5

FSR-IPL 070402 / CATECHOL / RHODIA
Appendix No. 8: Individual values for Tail length / STOMACH

Column   C	Animal N° Slide No. BC-07- Code BC-07-13 File No. BC-07-13												
Colored Colo	lo. BC-07- 3C-07-13 BC-07-1		6512						1100			00.10	
Colored   Colo	07-13	213 A	213B	213 C	214 A	214 B	214 C	215 A	215 B	215 C	216 A	216 B	216 C
1   11   12   12   13   13   13   13	┖	ò	02	<b>0</b> 3	9	05	တိ	E1	E2	E3	G.	G2	63
Mailength   Mail	2	Q1.xls	Q2.xds	Q3.xls	O1.xls	O2.xds	O3.xls	E1.xls	E2.xls	E3.xls	G1.xls	G2.xls	G3.xls
90.00 90.00	lea		Tail length			I ail length			Tail length			Tail length	
1,000   1,00		61.56	19.52	105.10	16.52	33.03	32.28	60.96	102.10	96.85	65.31	36.79	57.06
1,0,0,0   1,	2	60.06	29.28	228.22	63.81	57.81	93.09	78.08	55.55	34.53	67.57	81.83	34.53
1,000	3	104.35	34.53	35.28	92.34	19.52	57.81	78.08	90.99	48.80	90'99	18.02	21.02
17.50   17.5	4	29.28	21.02	61.56	43.54	22.52	51.05	84.83	120.87	50.30	24.02	63.81	55.55
1985   1985	2	33.78	40.54	117.87	48.80	48.05	30.03	63.06	129.13	49.55	33.78	32.28	33.03
88.07         1.5.14         3.9.24 </td <td>9</td> <td>95.34</td> <td>57.06</td> <td>95.34</td> <td>109.61</td> <td>81.83</td> <td>30.78</td> <td>132.13</td> <td>198.95</td> <td>124.62</td> <td>71.32</td> <td>30.78</td> <td>25.53</td>	9	95.34	57.06	95.34	109.61	81.83	30.78	132.13	198.95	124.62	71.32	30.78	25.53
1,000, 1,000,	7	69.07	45.04	35.28	111.11	52.55	35.28	97.60	130.63	90.08	41.29	33.78	24.77
1,000	<b>&amp;</b>	36.79	13.51	45.79	57.06	59.31	45.04	88.59	138.14	97.06	25.53	97.60	64.56
1,000, 1,000,	υ <del>ς</del>	99.65	34.03	30.03	90.00	26.33	20.00	024.00	40.20	90.00	123.13	42.04	24.02
8.8.7.9         8.3.7.0         8.8.8.9         6.57.0         6.8.8.9         6.8.9.9         6.9.9.9 <th< td=""><td>2 7</td><td>130.03</td><td>41.29 51.05</td><td>70.04</td><td>00.00</td><td>38.29</td><td>78.05</td><td>92.04</td><td>68 32</td><td>153.45</td><td>34.53</td><td>53.30</td><td>16.50</td></th<>	2 7	130.03	41.29 51.05	70.04	00.00	38.29	78.05	92.04	68 32	153.45	34.53	53.30	16.50
92.26         11.17         70.98         66.89 <th< td=""><td>12</td><td>38 20</td><td>32.78</td><td>58.56</td><td>45.70</td><td>86.03 66.83</td><td>36.70</td><td>23.78</td><td>20.32</td><td>30.03</td><td>38.20</td><td>58.50</td><td>0,32 86.33</td></th<>	12	38 20	32.78	58.56	45.70	86.03 66.83	36.70	23.78	20.32	30.03	38.20	58.50	0,32 86.33
6500         147.89         31.83         43.54         35.29         45.30         45.34 <th< td=""><td>12</td><td>32.08</td><td>174.17</td><td>70.58</td><td>60.73</td><td>28.53</td><td>25.78</td><td>80.70</td><td>135 13</td><td>20.00</td><td>105 R5</td><td>28.53</td><td>27.78</td></th<>	12	32.08	174.17	70.58	60.73	28.53	25.78	80.70	135 13	20.00	105 R5	28.53	27.78
46.55         66.56         12.77         17.27         75.57         16.25         65.55 <th< td=""><td>2 4</td><td>92.20</td><td>147.90</td><td>31.53</td><td>43.54</td><td>35.28</td><td>50.30</td><td>63.04</td><td>123.12</td><td>27.78</td><td>79.58</td><td>20.22</td><td>132 88</td></th<>	2 4	92.20	147.90	31.53	43.54	35.28	50.30	63.04	123.12	27.78	79.58	20.22	132 88
7.704         \$4,504         \$1,504 </td <td><u> </u></td> <td>46.55</td> <td>85.58</td> <td>21.72</td> <td>27.03</td> <td>24.77</td> <td>17.27</td> <td>70.07</td> <td>25.53</td> <td>18.02</td> <td>55.55</td> <td>52.55</td> <td>67.57</td>	<u> </u>	46.55	85.58	21.72	27.03	24.77	17.27	70.07	25.53	18.02	55.55	52.55	67.57
4778         30.03         1183         26.28         87.84         33.78         1108.86         45.04         33.03         412.90           4778         30.03         720         720         42.04         33.78         1108.86         412.90         412.90           477.04         182.0         27.00         17.17         42.00         17.10         42.00         17.10         42.00         17.10<	16	42.04	54.05	18.77	52.55	38.29	94.59	132.13	130.63	36.04	40.54	63.81	101.35
47.79         30.76         7.20         7.5 (10.5)         57.6 (10.5)         4.20 (4)         39.04         164.4 (1)         30.84         16.10         27.79         30.76         17.20         17.87         16.41         10.20         57.77         10.20         57.77         10.20         57.77         10.20         57.77         10.20         57.77         10.20         57.77         10.20         57.87         10.20         57.77         10.20         57.87         10.20         57.77         10.20         57.87         10.20         57.77         10.20         57.87         10.20         57.77         10.20         57.87         10.20         57.77         10.20         57.87         10.20         57.87         10.20         57.87         10.20         57.87         10.20         57.87         10.20         57.87         10.20         57.87         10.20         57.87         10.20         57.87         10.20         57.87         10.20         57.87         10.20         57.87         10.20         57.87         10.20         57.87         10.20         57.87         10.20         57.87         42.20         60.60         60.60         60.60         60.60         60.60         60.60         60.60         60.60	17	27.78	30.03	81.83	26.28	87.84	33.78	108.86	45 04	33,03	98,35	41.29	117.87
42.06         17.82         57.81         27.78         27.10         17.15         60.67         17.82         67.81         102.10         67.81           42.04         29.26         54.06         12.76         42.29         59.31         47.30         57.81         17.16         60.53         46.55         67.81           27.76         10.75         9.76         44.29         59.31         47.30         57.81         17.267         84.55         67.84           10.65         4.65         4.65         32.28         39.04         68.06         16.66         20.26         53.87         67.31         27.84         68.55         65.31         68.56         66.56         17.83         66.57         17.33         68.57         17.84         68.57         17.85         68.57         17.85         68.57         17.85         68.57         17.85         68.53         68.51         17.84         17.85         17.85         68.51         17.85         17.85         17.85         17.85         17.85         17.85         17.85         17.85         17.85         17.85         17.85         17.85         17.85         17.85         17.85         17.85         17.85         17.85         17.85	18	42.79	30.78	72.07	51.05	45.04	39.04	164.41	93.84	164.41	29.28	27.78	13.51
42.04         22.8         54.05         12.76         42.44         42.06         12.76         42.45         42.07         47.30         47.30         47.30         47.30         47.30         47.30         47.30         47.30         46.56         46.56         47.30         47.30         47.30         46.50         46.50         47.30         47.30         46.50         46.50         47.30         47.30         47.30         46.50         46.50         47.30	19	35.28	19.52	39.04	75.82	57.81	27.78	21.02	147.14	67.57	102.10	57.81	117.12
57.06         1013         8.76         44.29         56.31         47.30         57.81         17.26 T         98.55         18.44           105.85         12.76         44.29         32.28         36.40         16.06         106.80         32.76         16.07         17.32         12.27         32.78         36.64         32.87         36.78         17.26 T         122.10         46.55         36.78         17.26 T         46.55         36.78         17.26 T         32.78         36.78         17.27         46.56         36.78         46.56         46.	20	42.04	29.28	54.05	12.76	43.54	21.02	123.87	121.62	84.08	95.34	80.33	88.59
105.16         130.78         46.59         33.78         46.59         13.43         9.45         11.16.0         14.43         36.74         46.55         14.24         36.74         46.55         17.24         36.74         17.27         46.75         16.85         44.29         35.04         46.55         17.33         12.24         36.74         45.55         46.55         17.62         47.33         42.64         98.35         65.06         17.27         47.33         14.26         98.35         66.07         47.57         17.33         14.26         98.35         66.07         47.57         47.53         47.54         98.35         66.07         47.54         47.54         98.35         66.07         47.54         47.54         47.54         47.54         47.54         47.54         47.54         47.54         47.54         47.54         47.54         47.54         47.54         47.54         47.54         47.54         47.55         47.54         47.54         47.54         48.55         44.83         47.64         47.54         48.55         44.83         47.65         47.54         47.54         48.57         47.54         47.54         47.55         47.55         47.55         47.54         47.55	21	57.06	101.35	9.76	44.29	59.31	47.30	57.81	172.67	98.35	46.55	87.84	42.79
No. 85	22	21.77	30.78	82.58	33.78	46.55	15.01	134.38	94.59	151.65	32.28	36.04	29.28
106.10         30.20         41.20         30.30         76.28         14.54         9.00         45.51         45.51         45.51         45.51         45.51         45.51         45.51         45.51         45.52         45.52 <th< td=""><td>23</td><td>103.83</td><td>12.70</td><td>67.14</td><td>32.20</td><td>39.04</td><td>00.00</td><td>100.00</td><td>69.94</td><td>20.79</td><td>102.10</td><td>40.33</td><td>04.80</td></th<>	23	103.83	12.70	67.14	32.20	39.04	00.00	100.00	69.94	20.79	102.10	40.33	04.80
46 0.6         46 0.5         97 0.0         113.36         78 83         27 0.3         66 0.0           48 0.0         46 0.5         47 0.0         113.36         78 83         46 0.0         47 0.0         113.36         78 83         66 0.0           69 0.7         22.56         80 33         63 0.0         70 57         16 0.2         16 0.0         70 57         17 18         17 2.7         47 30           69 0.7         22.56         80 33         63 0.0         70 57         17 18         96 20         71 12.7         47 30           66 3.1         42.59         18.50         18.52         48.50         18.52         18.52         17 18.6         17 18.6         17 18.6         17 17.2         17 18.6         17 18.6         17 18.6         17 18.6         17 18.6         17 18.6         17 18.6         17 18.6         17 18.6         17 18.6         17 18.6         18 18.6 <td>25</td> <td>108 11</td> <td>36.04</td> <td>69.07</td> <td>41.29</td> <td>39.79</td> <td>76.58</td> <td>158.41</td> <td>77.33</td> <td>142.64</td> <td>93.04</td> <td>65.34</td> <td>38.29</td>	25	108 11	36.04	69.07	41.29	39.79	76.58	158.41	77.33	142.64	93.04	65.34	38.29
75 07         70 57         78 83         44.29         19.52         65.31         102.85         115.61         42.04         17.27         47.30           69 07         45.55         63.06         70.57         66.32         20.27         12.23         21.77           57.81         42.54         80.23         86.04         33.78         46.80         20.27         12.23         11.77         21.77           56.31         32.54         82.58         36.04         55.55         84.83         70.57         12.23         21.77         21.77           48.37         32.38         36.29         37.54         12.23         11.86         21.23         21.77           48.27         32.28         38.29         10.360         27.03         11.08         21.77         21.77           98.35         81.20         10.27         17.01         85.33         10.61         37.54         37.54           40.55         81.80         17.32         27.03         12.91         86.33         10.61         37.54         37.54           40.55         81.80         17.32         27.03         17.84         17.84         37.54         37.54         37.54         37.54	26	48.05	40.54	51.80	56.31	76.58	46.55	97.60	113.36	78.83	27.03	90.99	30 03
69.07         52.55         80.33         63.06         70.57         68.32         118.62         29.28         315.3         122.37         21.77           67.81         43.54         82.54         80.03         33.78         48.69         33.78         48.69         31.73         48.00         21.02           66.78         72.54         82.54         44.80         33.78         70.57         137.38         66.82         111.66         12.77         25.53         20.02           34.29         68.32         37.54         49.55         86.33         110.61         22.53         100.60         22.53           98.36         88.33         144.14         33.03         120.12         20.27         120.87         73.57         10.88         23.78           20.20         34.53         20.27         120.87         73.57         10.61         39.79         39.78           20.20         34.53         20.27         120.87         73.57         10.61         39.79         39.78         39.33         10.61         39.78         39.78           48.80         36.60         17.32         27.03         129.34         129.34         37.54         48.89         39.78	27	75.07	70.57	78.83	44.29	19.52	65.31	102.85	115,61	42.04	17.27	47.30	35.28
56.31         4.354         82.58         36.04         33.78         7.880         70.27         172.82         20.27         48.80         21.02           46.29         13.69         35.56         64.83         70.57         17.82         20.27         44.89         21.02           44.29         12.63         16.35         64.83         70.57         17.64         12.77         21.02         22.22           88.37         12.01         16.22         20.27         12.02	28	69.07	52.55	80.33	63.06	70.57	68,32	118.62	29.28	31,53	122.37	21.77	82.58
46.29         73.28         38.29         103.60         55.55         86.33         51.33         96.85         111.86         22.52           33.76         30.03         44.29         56.80         33.00         15.77         25.53         29.28           33.76         30.03         44.29         56.80         27.03         10.07         12.087         73.57         26.53         24.02           98.35         34.63         36.04         46.56         27.03         12.01         20.07         12.087         73.57         26.53         10.61         37.54           56.00         40.54         76.58         46.55         74.32         69.07         34.53         10.60         39.79         37.54           48.77         21.77         75.39         76.89         77.32         76.89         77.83         76.89         66.82         17.34         76.89         66.83         10.60         39.74         37.54           48.77         21.77         77.33         78.08         83.33         97.00         113.85         113.88         10.60         33.03         10.61         10.51         20.23         20.28         45.54         42.04         42.04         42.04	29	57.81	43.54	82.58	36.04	33.78	54.80	33.78	72.82	20.27	48.80	21.02	29.28
44.29         78.83         68.32         57.54         19.52         49.55         60.53         10.0         10.0         10.51         20.53         29.28           98.36         83.35         144.14         33.03         120.12         20.27         120.87         73.57         28.53         10.51         27.03           98.36         83.33         144.14         33.03         120.12         20.27         120.87         73.57         28.53         10.51         27.52         24.02           24.02         50.30         34.53         38.29         66.82         120.87         78.28         10.60         33.78         10.51         37.54           24.02         50.30         36.04         53.30         56.80         17.82         60.07         36.30         10.50         37.54           18.77         21.77         75.60         66.82         120.13         77.03         120.93         12.94         36.30         96.81         37.54           18.77         21.77         76.88         40.89         77.03         120.13         120.13         37.54         120.13         37.54         120.81         37.54         120.81         37.54         120.81         37.54	30	56.31	32.28	38.29	103.60	55.55	84.83	70.57	137.38	96.85	111.86	22.52	12.76
33.78         30.03         144.14         33.63         120.12         27.103         113.01         173.02         173.02 <td>31</td> <td>44.29</td> <td>/8.83</td> <td>68.32</td> <td>47.75</td> <td>19.52</td> <td>49.55</td> <td>86.33</td> <td>21.62</td> <td>//-61</td> <td>25.53</td> <td>29.28</td> <td>11/.8/</td>	31	44.29	/8.83	68.32	47.75	19.52	49.55	86.33	21.62	//-61	25.53	29.28	11/.8/
90.37         30.38         30.99         120.15         120.17         28.37         100.60         39.79         37.34           24.02         50.30         30.33         16.58         49.55         76.32         1111         83.37         100.60         39.79         37.54           24.02         50.30         40.54         66.82         123.24         26.30         92.34         37.54         37.54           18.77         26.30         66.82         12.32         26.30         12.31         30.33         97.60         98.53         96.31         97.80         60.81           79.58         42.79         77.33         78.08         83.33         97.60         82.34         15.80         90.03           45.70         27.78         84.08         12.01         129.13         35.28         82.31         13.38         90.39           45.70         27.78         84.08         12.01         99.85         80.33         10.51         29.28           15.62         26.08         12.01         129.13         35.36         10.51         29.28         10.59         21.02         10.51         29.29         10.51         20.31         10.51         20.31 <t< td=""><td>32</td><td>33.78</td><td>30.03</td><td>44.29</td><td>24.80</td><td>430.43</td><td>27.03</td><td>30.03</td><td>115.61</td><td>129.13</td><td>108.86</td><td>24.02</td><td>23.27</td></t<>	32	33.78	30.03	44.29	24.80	430.43	27.03	30.03	115.61	129.13	108.86	24.02	23.27
24,02         51,80         40,54         76,58         49,55         74,32         69,07         34,53         59,31         92,34         37,54           18,77         21,77         79,58         66,82         123,87         63,06         73,28         94,59         63,81         92,34         37,54           48,00         40,00         51,80         71,32         71,28         63,06         71,32         94,59         60,81         94,59         60,81         96,83         90,09         96,83         92,34         13,136         90,09	34	50.33	34.53	38.20	61.56	34 53	26.21 26.28	11111	83.33	100 60	39.70	33.78	10.53
18.77         21.77         79.56         66.82         123.87         63.06         78.83         129.88         683.2         94.59         63.81           48.80         43.04         53.30         51.80         71.32         27.03         129.13         85.28         66.31         28.53         60.81           79.80         43.70         45.79         97.80         92.34         15.40         13.63         13.136         90.09           45.79         31.53         27.78         84.08         12.01         99.85         80.33         54.80         97.60         90.09           45.79         31.53         27.78         84.08         12.01         99.85         80.33         54.80         97.60         90.09           45.79         31.53         27.78         47.30         35.28         80.33         54.80         97.60         90.09           46.82         26.82         27.77         40.54         75.07         14.88         65.31         28.58         24.02         66.82         21.77           37.44         44.05         47.30         47.30         47.30         140.39         12.66         82.36         33.03         27.78           21.	35	24 02	51.80	40.54	76.58	49.55	74.32	69 07	34 53	59.31	92.34	37.54	66.82
48.80         36.04         53.30         51.80         71.32         27.03         129.13         35.28         62.31         28.53         60.81           79.58         42.79         77.33         76.08         82.33         97.60         92.34         155.40         173.63         171.38         30.03           45.72         25.53         92.34         51.80         12.01         98.85         80.33         53.03         171.38         30.03           115.61         60.81         27.78         84.08         12.01         30.83         83.33         54.80         90.99         90.99           115.61         60.82         25.34         66.82         23.34         54.80         90.99         90.09           21.77         40.54         77.33         33.03         15.01         50.30         140.39         24.02         51.05         42.04           21.77         40.54         75.07         114.86         65.31         50.30         97.60         143.39         24.02         51.05         42.04           21.77         40.54         75.07         114.86         65.31         51.06         42.02         51.05         51.05           20.28         <	36	18.77	21.77	79.58	66.82	123.87	63.06	78.83	129.88	68.32	94.59	63.81	63.81
79.58         42.79         77.33         78.06         88.33         97.60         92.34         155.40         133.63         131.36         30.03           45.79         21.73         78.08         12.04         12.04         99.85         60.33         65.33         14.36         97.60         97.60         97.09           75.82         25.53         92.34         51.80         41.29         34.53         126.87         66.08         33.03         10.51         29.86         96.09         33.03         10.51         29.86         97.60         97.09         97.09         90.09         97.60         33.03         10.51         29.28         10.51         29.28         10.51         29.28         10.51         29.28         10.51         29.28         24.02         10.51         29.28         24.02         42.04         26.28         24.02         42.04         26.28         24.02         42.04         26.28         24.02         42.04         42.04         42.04         42.04         42.04         42.04         42.04         42.04         42.04         42.04         42.04         42.04         42.04         42.04         42.04         42.04         42.04         42.02         42.02         42.	37	48.80	36.04	53.30	51.80	71.32	27.03	129.13	35.28	62.31	28.53	60.81	120.12
45.79         31.53         27.78         84.08         12.01         99.85         80.33         54.80         97.60         90.09           75.62         25.53         25.34         51.80         41.29         34.53         12.68.7         96.09         33.03         10.51         29.28           115.62         60.81         92.34         78.08         30.78         35.28         88.33         236.09         10.51         29.28           115.62         20.27         77.33         33.03         15.01         50.30         140.39         136.63         68.31         138.14         26.28           21.77         40.54         75.07         114.86         65.31         15.02         17.00         16.86         68.27         66.82         21.77           37.64         40.59         35.28         36.4         19.52         47.30         17.62         10.58         82.58         33.03         27.78           26.28         48.50         46.79         19.52         47.30         17.62         10.58         82.58         33.03         27.78           26.28         48.50         47.30         19.52         37.54         121.62         10.58         82.58	38	79.58	42.79	77.33	78.08	83.33	97.60	92.34	155.40	133.63	131.38	30.03	95.34
75.82         25.53         92.34         718.0         41.29         34.53         126.87         96.09         33.03         10.51         29.28           16.561         92.34         78.08         30.78         36.09         33.03         10.51         29.28           66.82         20.27         77.33         33.03         15.01         50.30         140.39         136.63         68.32         66.82         21.77           21.77         40.54         77.33         33.03         15.01         50.30         140.39         136.63         68.32         66.82         21.77           37.54         40.54         77.30         15.01         50.30         97.60         140.39         126.83         68.32         66.82         21.77           21.77         40.54         75.07         114.86         15.30         21.02         51.05         42.04           39.04         35.78         36.04         19.52         37.54         121.62         105.85         33.03         27.78           52.83         48.05         47.30         13.56         16.41         31.53         124.62         34.53         34.53           33.03         57.81         48.80	39	45.79	31.53	27.78	84.08	12.01	99.85	80.33	83.33	54.80	97.60	60.06	173,42
13.61   0.0,87   92,34   77,33   33.03   15.04   50.30   176.63   136.63   68.82   24.77   14.86   65.31   50.30   97.60   85.58   68.82   24.77   27.33   33.03   15.24   47.30   157.65   147.39   21.07   10.86   24.204   27.74   27.24   27.24   27.24   27.25   25.25   27.27   26.28   27.24	9	75.82	25.53	92.34	51.80	41.29	34.53	126.87	96.09	33.03	10.51	29.28	93.09
21,77         40,54         77,53         33,03         13,01         30,03         140,39         136,63         26,24         20,04         420,40	-4-	13.61	90.8	92.34	30.08	30.78	33.28	83.33	230.48	50.31	138.14	87.07	27.78
37.54         44.29         34.53         81.83         19.52         47.30         157.65         143.39         21.02         108.86         58.56           39.04         33.78         35.28         36.04         19.52         47.30         15.44         121.62         105.85         82.58         33.03         27.78           26.28         25.53         57.81         45.79         67.57         24.02         153.65         174.82         94.59         94.59         94.59           33.03         57.81         30.78         45.79         67.57         24.02         153.65         114.86         131.38         66.82         34.53           33.03         57.81         30.78         45.92         10.60         45.05         144.86         131.38         66.82         34.53           17.22         33.78         30.93         59.31         15.29         14.48         36.79         35.28           55.16         45.82         63.24         56.55         52.84         49.80         97.64         103.92         76.08         67.04         45.72           55.16         45.72         53.06         53.05         57.65         103.92         167.04         45.72	42	94.77	40.54	75.07	114 86	65.31	50.30	97.60	30.00	24.02	51.05	17.17	175.57
26.28         33.76         35.28         36.04         19.52         37.54         121.62         105.85         82.58         33.03         27.78           26.28         48.05         47.30         136.63         32.28         51.60         161.41         31.53         124.62         94.59         94.59           52.28         27.81         45.79         67.57         24.02         163.61         177.12         22.27         108.86         30.03           29.28         57.81         30.78         93.84         195.2         100.60         45.05         144.86         131.36         66.82         34.53           17.2         33.78         93.84         195.2         100.60         45.05         78.86         144.89         36.79         35.28           45.16         45.82         63.24         56.55         52.84         49.80         97.64         103.92         76.08         67.04         45.72           55.16         45.82         63.24         56.55         52.84         49.80         97.64         103.92         76.08         67.04         45.72	44	37.54	44.29	34.53	8183	19.52	47.30	157.65	143.39	21.02	108.86	58.56	26.28
26.28         48.05         47.30         133.63         32.28         518.00         161.41         31.53         124.62         94.59         94.59           25.56         55.76         46.79         67.57         24.02         153.15         117.12         23.27         10.86         30.03           33.03         57.81         30.78         25.53         83.33         78.08         133.63         144.89         86.82         34.53           17.27         33.78         48.80         31.53         93.09         59.31         144.89         36.79         35.28           55.16         45.82         63.24         56.55         52.84         49.80         97.64         103.92         67.04         45.72           54.74         56.55         52.84         49.80         97.64         103.92         67.04         45.72	45	39.04	33.78	35.28	36.04	19.52	37.54	121.62	105.85	82.58	33.03	27.78	75.07
52.55         25.53         57.81         45.79         67.57         24.02         153.15         117.12         23.27         108.86         30.03           33.03         57.81         30.78         25.53         83.33         78.08         1133.63         114.86         131.88         66.82         34.53           29.28         37.78         93.84         19.52         100.60         45.04         54.05         78.88         144.89         36.79         35.78           17.27         33.78         48.80         31.53         93.09         59.31         192.19         114.11         155.40         41.29         36.79           55.16         45.82         63.24         56.55         52.84         49.80         97.64         103.92         76.08         67.04         45.72           55.16         53.06         53.06         53.65         53.66         53.61         58.61	46	26.28	48.05	47.30	133.63	32.28	51.80	161.41	31,53	124.62	94.59	94.59	108.11
33.03         57.81         30.78         25.53         83.33         78.08         73.63         114.86         13.138         66.82         34.53           29.28         33.78         48.80         31.53         100.60         45.04         54.05         78.58         14.18         56.79         35.79         35.79         36.79	47	52.55	25.53	57.81	45.79	67.57	24.02	153.15	117.12	23.27	108.86	30.03	67.57
29,28 30,78 93,84 19,52 100,50 45,04 34,19 14,11 155,40 41,29 36,79 36,79 55,16 45,82 63,24 56,55 52,84 49,80 97,64 103,92 76,08 67,04 45,72 54,74 54,74 53,06 53,06 54,74	48	33.03	57.81	30.78	25.53	83.33	78.08	133.63	114.86	131.38	66.82	34.53	101.35
55.16 45.82 63.24 56.55 52.84 49.80 97.64 103.92 76.08 67.04 45.72 53.06 54.74 92.55 54.74 58.61 58.61	60	29.28	30.78	93.84	19.52	100.60	45.04	24.05	86.8/	144.89	36.79	35.28	28.53
53.10 43.04 63.04 50.05 53.06 43.00 10.55 10.00 01.04 43.12 53.06 64.74 58.61	0000						10 St		68.597			200	8K 65
20.20	n/animal	01 100		23.67	20.00	74.84 53.04	42.00	27.04	22.56	00'0/	27.70	43.64 48.64	00,00
	nidoeo					2		7.7	×4.×				

BC 0.713   B1.56   B2.78   B	Dose:	400 mg/kg/day (x2				6517	2" treatment:		26/09/2007 6520			6519	
Bit	O BC-07-	220 A	220 B	220 C	221 A	221 B	221 C	222 A	222 B	222 C	223 A	223 B	223 (
Fig. 18   Fig.	SC-07-13	B	F2	H3	¥	82	Ķ3	D4	D2	D3	S	SS	S
April Perget   Apri	BC-07-13	B1.xls	B2.xls	B3.xls	K1.xls	K2.xfs	K3.xls	D1.xls	D2.xls	D3.xls	S1.xls	S2.xls	S3.x
Column	le le		Tail length			Tail length			Tail length			Tail length	
1975   1970   1980   1977   1972   1975		26.28	34.53	32.28	15.01	146.39	16.52	130,63	60'96	11.26	19.52	57.81	54.0
1,2,4,4   4,48   1,38,55   1,48   1,38,55   1,48   1,38,55   1,48   1,38,55   1,48   1,38,55   1,48,55	2	93.09	27.03	60'96	18.77	23.27	51.05	98.35	31.53	133.63	26.28	24.77	45.0
1,2,5,5   1,17,5   1,15,5   1,17,5	3	221.47	54.80	136.63	14.26	32.28	45.79	33.03	45.79	30.78	18.77	60.81	54.0
1,136	4	25.53	27.78	61.56	102.85	48.80	30.03	18.77	69.82	61.56	27.78	27.78	31.5
9.150         9.450         17.00         9.450         17.00         9.450         17.00         9.450         17.00         9.450         17.00         9.450         17.00         9.450         17.00         9.450         17.00         9.450         17.00         9.450         17.00         9.450         17.00         9.450         17.00         9.450         17.00         9.450 <th< td=""><td>5</td><td>45.04</td><td>113.36</td><td>27.03</td><td>43.54</td><td>17.27</td><td>24.77</td><td>117.12</td><td>36.79</td><td>55.55</td><td>25.53</td><td>16.52</td><td>42.0</td></th<>	5	45.04	113.36	27.03	43.54	17.27	24.77	117.12	36.79	55.55	25.53	16.52	42.0
27.75         41.45         61.45         73.00         14.45         61.45         73.00         14.45         61.45         73.00         14.45         61.45         73.00         14.45         61.45         73.00         14.45         61.45         73.00         14.45         61.45         73.00         14.45         61.45 <th< td=""><td>9</td><td>27.03</td><td>94.59</td><td>12.01</td><td>39.04</td><td>20.27</td><td>57.06</td><td>109.61</td><td>24.77</td><td>36.04</td><td>32.28</td><td>51.05</td><td>33.0</td></th<>	9	27.03	94.59	12.01	39.04	20.27	57.06	109.61	24.77	36.04	32.28	51.05	33.0
13.77         41.60         67.27         43.60         14.81         14.85         14.27         14.86         14.87         14.87         14.80         14.87         14.80 <th< td=""><td>7</td><td>59.31</td><td>27.03</td><td>147.90</td><td>84.83</td><td>30.03</td><td>87.84</td><td>18.77</td><td>119.37</td><td>45.04</td><td>15.01</td><td>12.01</td><td>29.2</td></th<>	7	59.31	27.03	147.90	84.83	30.03	87.84	18.77	119.37	45.04	15.01	12.01	29.2
March   Marc	80	27.78	91,59	114.86	13.51	72.07	21.77	153.90	31.53	36.79	28.53	25.53	35.2
25.27         10.00 <th< td=""><td>6</td><td>73.57</td><td>48.05</td><td>82.58</td><td>26.28</td><td>20.27</td><td>84.83</td><td>23.27</td><td>114.11</td><td>33.78</td><td>31.53</td><td>31.53</td><td>29.2</td></th<>	6	73.57	48.05	82.58	26.28	20.27	84.83	23.27	114.11	33.78	31.53	31.53	29.2
138.00   118.85   153.84   125.21   125.21   125.21   125.21   125.22   1	19	99.10	14.26	51.05	24.77	45.79	52.55	139.64	36.79	30.78	48.05	17.27	75.0
1889   1837   1838   1837   1832   1833   1834   1837   1838   1837   1838   1837   1838	=	75.52	102.85	131,38	13.51	40.75	37.54	87.67	123.12	25.53	26.28	71.12	120.
148.28   25.05   25.	12	138.89	119.37	50.82	75.22	39.79	27.03	132.88	37.34	38,29	19.52	36.04	62.3
1878   1878	13	44.29	84.83	43.54	19.52	86.33	39.04	112.61	114.11	24.77	14.26	27.78	797
13.51.3         3.51.05         4.52.74         4.52.7         4.40.34         50.26         4.52.7         1.52	14	148.65	27.03	90.09	14.26	24.02	30.03	90.84	25.55	60.06	53.30	18.77	50.3
1.42.39         1.50         2.92.88         1.95         2.17.6         1.80         2.17.6         1.17.6         1.17.6         1.20         1.50         1.57         1.20.3         1.17.6         1.20         1.57         1.57         1.20.3         1.17.6         1.17.7         1.17.6         1.17.7         1.17.6         1.17.7         1.17.7         1.17.8         1.17.6         1.17.7         1.17.7         1.17.8         1.17.8         1.17.7         1.17.8 <th< td=""><td>15</td><td>135.13</td><td>33.03</td><td>43.54</td><td>29.28</td><td>36.04</td><td>23.27</td><td>40.54</td><td>35.28</td><td>42.04</td><td>58.56</td><td>13.51</td><td>39.7</td></th<>	15	135.13	33.03	43.54	29.28	36.04	23.27	40.54	35.28	42.04	58.56	13.51	39.7
134.88	16	128.38	1.50	29.28	19.52	27.78	18,02	122.37	61.56	12.76	12.01	67.57	19.5
152,40   102,40   102,50   123,51   135,41   1	17	134.38	43.54	105.85	45.79	28.53	15.77	30.03	34.53	119.37	18.02	30.03	40.5
83.33         93.40         47.30         40.54         73.80         76.04         77.23         71.05.01         75.23         71.05.20         75.23         71.05.20         75.23	18	152.40	102.85	22.52	15.77	41.29	13.51	37.54	54.05	54.05	24.11	15.77	16.5
85.35         35.04         15.37         19.32         7.685         6.2.26         19.32         7.682         31.53         19.32         7.685         19.32         7.685         19.32         7.685         19.32         15.34         19.32         15.34         19.32         15.34         19.32         15.34         19.32         15.37         19.32         15.34         19.32         19.32         19.33         19.33         19.34         41.39         19.32         20.32         20.32         19.32         20.32         19.32         20.32         19.32         20.32         19.32         19.32         19.32         19.32         19.32         19.32         19.32         19.32         19.32         19.32         19.32         19.32         19.32         19.32         19.33 <t< td=""><td>19</td><td>81.08</td><td>53.30</td><td>47.30</td><td>40.54</td><td>021.80</td><td>12.01</td><td>107.36</td><td>122.37</td><td>100.60</td><td>13.51</td><td>45.79</td><td>22.2</td></t<>	19	81.08	53.30	47.30	40.54	021.80	12.01	107.36	122.37	100.60	13.51	45.79	22.2
54.55         76.58         76.59         76.50         15.74         75.50         15.74         15.50         15.74         15.50         15.74         15.50         15.77         44.29         16.57         16.77 <th< td=""><td>20</td><td>83.33</td><td>39.04</td><td>13.51</td><td>78.52</td><td>78.83</td><td>20.28</td><td>118.62</td><td>19.52</td><td>18.02</td><td>75.82</td><td>31.53</td><td>30.0</td></th<>	20	83.33	39.04	13.51	78.52	78.83	20.28	118.62	19.52	18.02	75.82	31.53	30.0
55.50         1 (1) 30         63.00         13.74         42.10         65.82         74.24         43.00         50.50         12.01         20.27         20.27         20.27         20.27         20.27         12.07         20.27         12.07         20.27         12.07         12.07         20.27         12.07         12.07         12.07         20.27         12.07	17	56.33	40.00	13.57	77.67	20.09	04.00	00.10	0.00	75.17	20.03	13.77	7.7
67.37         81.48         98.35         26.17         98.29         23.27         98.29         23.27         18.27 <th< td=""><td>77</td><td>35.35</td><td>144.06</td><td>76.00</td><td>132.40</td><td>07.77</td><td>24.02</td><td>42.04</td><td>30.03</td><td>80.00</td><td>42.03</td><td>20.27</td><td>20.72</td></th<>	77	35.35	144.06	76.00	132.40	07.77	24.02	42.04	30.03	80.00	42.03	20.27	20.72
63.06         68.35         55.04         20.26         30.03         117.12         10.16         20.17 <t< td=""><td>32</td><td>10.70</td><td>05.50</td><td>03.00</td><td>26.20</td><td>97.00</td><td>20.02</td><td>20.70</td><td>70.00</td><td>24.00</td><td>12.01</td><td>17.07</td><td>20.00</td></t<>	32	10.70	05.50	03.00	26.20	97.00	20.02	20.70	70.00	24.00	12.01	17.07	20.00
26.26         1.23.67         2.45.7         2.45.7         2.45.7         2.45.7         2.45.7         2.45.7         2.45.7         2.45.7         2.45.7         2.47.7<	47	07.07	00.00	90.53	07.07	30.70	39.79	30.29	147.49	404 25	13.77	10.77	40.7
36.70         1.62.01         1.62.01         1.62.01         1.62.01         1.62.01         1.62.01         1.62.01         1.62.01         1.62.01         1.62.01         1.62.01         1.62.01         1.62.01         1.62.01         1.62.01         1.62.01         1.62.01         1.62.02	22	03.00	422.02	20.03	23.27	30.78	10.02	30.03	70.07	04.50	20.04	27.07	12.7
24,77         15,01         26,72         22,22         21,17         14,114         26,53         25,23         21,77         15,01           182,88         44,29         156,90         35,28         30,33         14,11         14,89         64,56         57,06         38,29         16,52           186,32         55,54         17,27         32,28         36,79         170,42         27,38         15,70         38,29         16,52           186,32         55,54         17,27         32,28         30,03         45,04         170,42         27,38         16,57         77,33         48,80         16,52           186,33         71,32         60,06         28,53         15,77         106,11         48,06         57,07         14,26         15,77         32,17<	270	26.70	177.17	20.30	20.00	28 53	97.76	120.12	100 88	20.72	24 52	19.70	3 5
129.86         44.29         156.90         35.28         36.79         117.12         144.69         64.56         57.06         36.29         16.52           168.39         55.56         112.61         16.52         47.30         170.42         27.78         15.38         28.53         15.77         24.02           166.59         11.186         96.34         17.27         32.28         30.03         45.04         76.77         77.33         48.80         16.57         24.53           166.59         11.186         28.53         16.57         10.01         14.80         14.80         14.26         15.77         24.02           20.28         33.07         145.67         10.01         14.80         14.80         14.77         18.77         18.77         18.77         24.77         18.77         18.77         24.77         18.77         18.77         24.77         18.77         18.77         26.26         26.30         27.03         18.79         24.77         18.77         26.26         26.31         24.77         26.28         26.31         18.26         26.34         45.04         45.04         45.04         45.04         45.04         45.04         45.04         45.04         45.	28	24.77	30.04	120.12	20.32	32.28	20.72	141 14	25.53	25.50	24.55	15.70	46.5
168.32         56.56         112.61         16.52         47.30         170.42         27.78         157.38         28.53         15.77         34.53           86.33         93.44         86.32         47.30         170.42         27.78         17.32         16.67         24.02           11.86         95.34         18.27         30.03         45.44         70.57         77.33         48.80         19.52           196.63         75.07         11.86         26.28         15.77         108.11         49.56         126.87         77.33         48.80         19.77           20.78         75.07         11.186         26.28         28.53         18.02         18.58         56.31         18.77         77.33         18.77         24.07         18.77         24.07         18.77         24.07         18.77         24.07         18.77         24.07         18.77         24.07         18.77         24.07         18.77         24.07         18.77         24.07         18.77         24.07         18.77         24.07         18.77         24.07         18.77         24.07         18.77         24.07         18.77         24.07         18.77         24.07         18.77         24.07         18.77<	20	120 88	44.29	156 90	35.28	36.79	117.12	144.89	64.56	57.06	38 20	16.52	42.0
86.33         93.84         68.32         33.76         45.79         43.54         74.32         11561         93.84         23.27         24.02           196.69         111.86         95.34         17.27         32.28         30.03         45.04         77.33         48.80         16.52           86.33         711.86         95.34         15.77         16.11         49.55         120.12         34.53         48.80         14.26         15.77           86.33         75.40         26.26         25.55         120.12         21.02         34.53         48.80         14.76         16.77           48.06         26.28         26.26         26.25         120.12         21.02         34.53         48.80         24.77         18.77           174.7         138.9         26.28         36.29         50.30         27.03         84.08         51.80         30.04         25.26           112.61         108.60         26.31         26.28         50.30         27.03         84.08         51.00         18.77         24.77           112.61         108.60         26.28         26.30         27.03         44.29         45.04         45.04         45.04         45.04	30	168 92	25.55	112.61	16.52	47.30	170.42	27.78	137.38	28 53	15.77	34 53	33.7
196.89         111.86         95.34         17.27         32.28         30.03         45.04         70.57         77.33         48.80         14.26         15.77           86.33         371.32         60.06         28.53         15.77         108.11         49.55         12.687         77.33         48.80         14.26         15.77           29.28         33.30         30.08         22.65         35.28         56.31         36.29         74.32         96.09         24.77         18.77           48.06         75.07         111.86         52.55         35.28         56.31         36.29         74.32         96.09         24.77         18.77           17.4.7         158.89         26.28         36.79         36.29         74.32         96.89         42.04         24.77           17.4.7         16.86.9         24.05         48.05         34.53         18.69         42.04         25.23           18.56         173.42         65.31         56.28         57.06         21.77         44.29         45.04         45.04         45.04         30.78           18.56         10.86.4         10.86.4         44.29         16.74         45.04         45.04         30.03	31	RG 33	03.84	68 32	33.78	45.79	43.54	74.32	115.61	03.84	23.97	24.03	30.0
86.33         71.32         60.06         28.53         15.77         108.11         49.55         126.87         48.80         14.26         15.77           29.28         33.03         145.64         30.78         52.56         120.12         34.53         96.09         24.77         18.77           40.04         7.22         33.03         145.64         30.78         52.56         120.12         34.53         96.09         24.77         18.77           40.04         7.05         26.28         36.79         28.53         18.02         135.88         56.31         13.63         30.03         30.78           87.84         150.20         26.28         36.79         48.00         26.28         99.10         42.9         16.52         30.03         30.78	32	106.60	111.86	05.34	17.27	32.28	30.03	45.04	70.57	77.33	48.80	10.52	27.5
29.28         33.32         145.64         20.08         52.55         120.12         21.02         34.53         96.09         24.77         18.77           48.05         75.07         111.86         52.55         35.28         56.31         38.29         74.32         96.69         24.77         18.77           48.05         75.07         111.86         173.42         26.28         36.79         50.30         27.03         84.08         51.80         95.34         15.01         16.72           11.186         173.42         66.31         58.79         27.03         84.08         51.80         95.34         15.01         16.52           11.186         173.42         66.31         57.65         34.53         10.285         99.10         44.29         45.04         25.28           112.61         108.69         44.29         16.52         20.27         167.41         45.04         116.04         25.28           112.61         108.69         16.52         20.27         167.41         45.04         116.36         37.54         30.78           109.61         108.61         16.52         20.27         167.41         45.04         116.36         37.54         30.03	200	86.33	71.33	80.08	28.52	15.77	108 11	A0 55	126.87	08.8V	90.01	15.77	2.5
48.06         75.07         117.06         52.55         35.28         56.31         36.29         74.32         96.85         42.04         24.77           17.417         138.89         26.28         28.53         18.58         13.63         30.03         30.03         30.78           8.784         150.7         14.29         26.28         36.79         48.05         27.03         84.08         51.80         45.04         25.28         30.03         30.03         30.78         30.03         30.03         30.78         30.03         30.03         30.78         30.03         30.03         30.78         30.03         30.03         30.78         30.03         30.03         30.78         30.03         30.03         30.78         30.03         30.0	35	20.33	33.03	145.64	30.78	52.55	120.12	21 02	24 53	00.00	24.77	18.77	171.6
174.77         188.89         26.28         28.53         28.53         1602         15.88         56.31         153.63         30.03         30.78         37.17           174.77         168.89         26.28         28.53         28.53         1602         15.88         56.31         153.63         30.03         30.78           11.2         11.0         10.0         26.28         36.79         50.30         27.03         84.08         56.28         30.03         30.78         16.52         26.28         50.01         16.52         45.04         45.04         26.28         50.01         44.29         45.04         26.28         30.03         30.78         26.28         50.01         102.86         18.77         26.28         30.03         30.78         26.28         30.03         30.78         26.28         30.03         30.78         26.28         30.04         26.28         30.04         26.28         30.04         26.28         30.04         26.28         30.03         30.78         30.78         30.78         30.78         30.78         30.78         30.78         30.78         30.78         30.78         30.78         30.78         30.78         30.78         30.78         30.78         30.78	7,5	AB 05	75.07	11186	52.55 52.55	35.28	56.24	38.70	24.35	26.90	42 CA	27.77	25.0
87.84         150.90         26.28         36.79         50.30         27.03         84.06         51.80         95.34         15.01         16.52           11.186         173.42         66.31         54.05         48.05         34.53         10.285         99.10         44.29         45.04         25.53           112.61         108.66         186.18         34.53         38.29         37.54         45.04         25.53           24.77         108.66         186.58         38.84         32.4         18.77         20.28           112.61         108.66         186.98         26.28         20.27         16.741         45.04         116.36         37.54         30.78           24.77         10.66         85.58         20.27         16.741         45.04         116.36         21.77         20.28           33.06         13.06         14.77         57.06         86.59         27.77         36.79         43.54         80.63         21.77         21.77           24.02         33.06         16.52         27.77         16.46         43.54         48.05         21.77         21.77           24.02         33.06         33.66         24.77         36.79	88	174.17	138.89	26.28	28.53	28.53	18.02	135.88	56.31	133.63	30.03	30.78	20.2
11.186         173.42         65.31         54.05         48.05         34.53         102.85         99.10         44.29         45.04         25.53           18.58         18.68         24.92         31.53         38.29         54.80         26.28         99.10         44.29         45.04         25.58           11.21         186.88         24.92         44.29         16.58         99.10         44.29         25.28         37.54         37.54         37.54         37.54         37.54         30.28         37.54         37.78         37.78         37.78         37.78         37.78         37.78         37.78         39.28         37.78         39.28         30.03         39.28         30.03         39.28         30.03         39.28         30.03         39.28         30.03         39.28         30.03         39.28         30.03         39.39         30.03         30.	37	87.84	150.90	26.28	36.79	50.30	27.03	84.08	51.80	95.34	15.01	16.52	49.7
85.56         181.68         219.22         31.53         38.29         54.80         26.28         59.31         103.60         18.77         26.28           24.77         111.261         108.66         146.69         44.29         16.52         20.27         16.741         45.04         116.36         37.54         30.78           24.77         110.60         186.18         24.77         57.06         21.77         99.85         27.78         12.76         21.77           33.03         76.58         33.78         39.04         24.77         86.59         24.77         30.63         21.77         26.28         33.03           4.02         7.65         26.31         24.77         36.64         45.64         45.64         21.77         26.28           4.02         2.07         16.58         24.77         36.96         24.77         36.96         24.77         26.28         33.03           4.02         3.9.79         7.58         39.04         7.32         24.77         36.56         24.77         36.56         21.77         26.53         21.02           4.02         4.02         4.02         4.02         4.04         4.06         21.77         26.28	38	111.86	173.42	65.31	54.05	48.05	34.53	102.85	99.10	44.29	45.04	25.53	36.7
112.61         108.86         196.69         44.29         16.52         20.27         167.41         45.04         116.36         37.54         30.78         30.78           24.77         101.11         160.93         5.55         57.06         86.58         92.94         29.24         29.28         30.03         29.28           109.61         160.94         24.77         57.06         86.58         92.94         22.34         21.77         27.03           68.82         16.59         24.77         57.06         86.59         19.52         66.31         130.63         34.53         48.05         21.77         27.03           24.02         36.76         16.55         24.77         36.76         24.77         36.76         28.77         36.76         21.77         27.03           24.02         36.76         36.76         24.77         36.76         24.77         36.76         28.73         31.53         26.28         30.03         32.52           24.02         36.30         47.16         16.52         32.26         32.26         32.53         31.53         22.53         22.53         22.53         22.53         22.53         22.53         22.53         22.53	30	85.58	181.68	219.22	31.53	38,29	54.80	26.28	59.31	103.60	18.77	26.28	27.7
24.77         111.11         180.93         52.55         57.06         85.58         93.84         92.34         29.28         30.03         29.28           109.61         60.62         186.94         24.77         88.59         12.77         36.79         43.54         80.65         27.78           33.03         165.94         24.77         88.59         19.52         65.31         130.63         34.53         48.05         27.78           24.02         76.58         33.78         39.04         52.55         24.77         36.79         43.54         98.85         26.28         27.55           72.82         34.53         75.86         86.33         14.11         16.54         32.88         13.53         25.53         22.55           117.12         146.39         70.57         28.53         14.29         107.36         42.04         12.537         61.56         21.02           17.12         146.39         70.57         84.83         48.05         18.52         11.53         42.04         12.53         61.56         21.02           13.57         12.46         115.61         11.58         11.58         11.58         11.58         11.58         11.58	40	112.61	108.86	196.69	44.29	16.52	20,27	167.41	45.04	116.36	37.54	30.78	27.7
109.61         100.60         168.18         24.77         57.06         21.77         57.78         12.78         21.77         27.78           33.03         165.84         24.77         88.59         65.31         130.63         34.53         48.05         27.03           40.22         76.58         33.78         39.04         52.56         24.77         36.79         45.54         99.85         26.28         33.03           7.24.02         38.79         75.82         24.77         36.79         45.54         99.85         26.28         33.03           7.24.02         38.79         76.58         86.33         14.11         16.54         32.85         31.53         22.53         22.52           17.12         146.39         70.57         28.53         141.29         107.36         42.04         125.37         61.56         21.02           13.0         62.37         12.0         37.54         77.33         65.31         27.03           13.0         12.46.7         15.41         64.56         28.53         12.0         24.77         23.27           13.57         12.46.7         15.41         64.56         28.54         102.10         35.28	41	24.77	111.11	180.93	52.55	57.06	85.58	93.84	92.34	29.28	30.03	29.28	94.5
33.03         63.06         195.94         24.77         88.59         195.2         65.31         130.63         34.53         48.05         27.03           24.02         39.78         33.78         39.04         52.56         24.77         36.79         43.54         99.65         26.28         33.03           24.02         39.79         75.82         39.04         71.32         27.78         154.65         28.53         31.53         25.53         22.52           17.17         146.39         70.57         28.63         114.11         16.52         32.28         148.65         132.86         21.77         27.03           117.12         146.39         67.05         84.83         48.05         44.29         107.36         42.04         12.37         61.31         27.03           130.63         73.57         161.41         138.14         64.56         28.53         169.67         87.09         26.28         24.77         23.27           130.63         124.62         156.9         120.87         10.10         35.28         24.77         53.27           135.74         124.67         49.29         47.16         82.75         68.18         24.77         53.27 <td>42</td> <td>109.61</td> <td>100.60</td> <td>186.18</td> <td>24.77</td> <td>57.06</td> <td>21.77</td> <td>99.85</td> <td>27.78</td> <td>12.76</td> <td>21.77</td> <td>27.78</td> <td>18.7</td>	42	109.61	100.60	186.18	24.77	57.06	21.77	99.85	27.78	12.76	21.77	27.78	18.7
69.82         76.58         33.78         39.04         75.55         24.77         36.79         43.54         99.85         26.28         33.03           7.24.02         34.53         27.82         39.04         71.52         27.78         154.65         28.53         31.53         25.53         22.55         22.770         27.03         42.04         10.73         47.74         47.74         47.16         47.16         47.16         47.16         47.16         47.16         47.16         47.16         47.16         47.16         47.16         47.16 <td< td=""><td>43</td><td>33.03</td><td>63.06</td><td>195.94</td><td>24.77</td><td>88.59</td><td>19.52</td><td>65.31</td><td>130.63</td><td>34.53</td><td>48.05</td><td>27.03</td><td>25.5</td></td<>	43	33.03	63.06	195.94	24.77	88.59	19.52	65.31	130.63	34.53	48.05	27.03	25.5
24.02         38.57         75.82         28.63         27.78         17.46         28.53         25.53         22.62           7.32         34.57         277.82         34.54         32.86         31.53         25.53         22.62           117.12         146.39         70.57         28.53         144.29         107.36         42.04         125.37         21.02           87.09         62.31         56.30         44.29         107.36         42.04         125.37         21.02           130.62         62.31         56.30         44.29         107.36         42.04         175.37         61.56         21.02           130.62         62.31         17.43         66.31         27.03         27.03         27.03           130.62         12.462         15.61         136.34         27.73         66.31         24.77         23.27           130.62         12.462         15.61         159.34         17.087         102.10         35.28         24.77         68.32           13.57         12.462         15.62         17.64         12.087         102.10         35.28         24.77         68.32           13.57         12.462         16.44         16.44	44	69.82	76.58	33.78	39.04	52.55	24.77	36.79	43.54	99.85	26.28	33.03	22.5
72.82         34.53         207.95         86.33         114.11         16.52         32.28         148.65         132.88         21.77         27.03           117.12         146.39         70.54         28.53         56.30         44.29         107.36         42.04         125.37         61.56         21.02           87.09         62.31         75.57         161.41         138.14         64.56         28.53         169.67         87.64         77.33         65.31         27.03           73.57         161.41         138.14         64.56         28.53         169.67         87.09         26.28         24.77         23.27           83.24         12.462         115.61         138.14         64.56         28.53         10.87         68.18         24.77         68.32           83.24         83.24         12.87         10.87         49.50         47.16         82.75         68.18         59.52         29.95         27.70           83.24         83.30         45.68         70.15         35.52         29.95         27.70	45	24.02	39.79	75.82	39.04	71.32	27.78	154.65	28.53	31.53	25.53	22.52	27.7
17.12   146.39   70.57   28.53   50.30   44.29   107.36   42.04   72.537   61.56   21.02     17.09   62.31   54.06   84.83   48.65   19.52   31.53   37.54   77.33   65.31   27.03     13.67   124.62   115.61   159.91   27.03   92.34   120.87   102.10   35.28   24.77   23.27     83.24   73.47   89.29   40.67   49.20   47.16   82.75   68.18   59.52   29.95   27.70     45.68   70.15   70.15   32.31     32.31   32.31   32.31   32.31     33.30   34.85   34.85   32.31     34.85   34.85   32.31     35.85   32.31	46	72.82	34.53	207.95	86.33	114.11	16.52	32.28	148.65	132.88	21.77	27.03	12.7
130.63   73.57   73.40   73.57   73.40   73.57   73.	40	11/12	40.39 62.34	70.57	28.53	30.30	44.29	107.35	42.04	125.37	61.56	20.02	18.0
73.57 12.46 15.61 15.89 27.03 92.34 120.87 102.10 35.28 24.77 68.32 83.24 79.17 89.29 40.67 49.20 47.16 82.75 68.18 59.52 29.95 27.70 83.30 45.68	40	130.63	73.57	161.41	138 14	84 56	28.52	160.67	27.00	26.38	94.77	27.03	0.04
83.24 79.17 89.29 40.67 49.20 47.16 82.75 68.18 59.52 29.95 27.70 83.90 45.68 70.15 70.15	20	73.57	124.62	115.61	159.91	27.03	92.34	120.87	102.10	35.28	24.77	68.32	102.8
83.90 45.68 70.15 32.91	an/slide	83.24	79.17	89.29	40.67	49.20	47.16	82.75	68.18	59.52	29.95	27.70	41.0
	leminetue		00 60			XX 41							

BCOT-13   1.34   2.24   2.25	Animal N°	100	6524			6521			6522			6525	
11   12   12   13   13   14   15   15   15   15   15   15   15	de No BC-07-	224 A	724 B	224 C	225 A	1 225 B	1 225 C	226 A	226 B	226 C	227 A	227 B	227 C
1   145   15   15   15   15   15   15	de BC-07-13	Σ,	J2	53	S	23	ຮ	7	7	[3	<b>R</b> 4	82	R3
Mail Bright	a No. BC-07-13	J1.xls	J2.xts	J3.xls	C1.xls	C2.xls	C3.xls	L1.xls	L2.xls	L3.xls	R1.xls	R2.xls	R3.xls
1. 17. In 18.00         1. 17. In	ofcell		I all length			l all length			I all length			Tail length	
4.2. A. B.	_	12.76	84.83	23,27	37.54	24.77	17.27	53.30	51.05	25.53	15.01	43.54	39.04
Street   S	2	27.78	16.52	25.53	27.03	25.53	25.53	51.80	15.77	32.28	19.52	11.26	72,07
1975   1975	3	45.04	50.30	30.78	23.27	12.76	22.52	30.78	40.54	43.54	73.57	30.78	70.57
1,000, 1,000,	4	53.30	16.52	25.53	21.02	33.78	39.79	53.30	26.28	39.79	35.28	22.52	27.03
No. 1, 1975   1985	2	35.28	18.//	24.11	22.52	77.17	52.55	76.61	00.00	43.54	17.71	71.32	95.34
0.50         1.65         0.50         1.75         1.75         1.75         2.75 <th< td=""><td>9</td><td>16.52</td><td>31.53</td><td>17.21</td><td>57.81</td><td>29.28 12.51</td><td>42.79</td><td>30.78</td><td>26.53</td><td>81.83</td><td>20.12</td><td>79.52</td><td>47.29</td></th<>	9	16.52	31.53	17.21	57.81	29.28 12.51	42.79	30.78	26.53	81.83	20.12	79.52	47.29
24,77         27,78 <th< td=""><td>~ α</td><td>50.77</td><td>44.26</td><td>42.78 35.28</td><td>26.38</td><td>13.51</td><td>24.02</td><td>21.11</td><td>12.76</td><td>26.03</td><td>25.73</td><td>97.67</td><td>47.30</td></th<>	~ α	50.77	44.26	42.78 35.28	26.38	13.51	24.02	21.11	12.76	26.03	25.73	97.67	47.30
25.27         5.0.0         5.0.0         12.7.5         26.25         26.25         26.25         26.27 <t< td=""><td>30</td><td>33.03</td><td>20.28</td><td>26.28</td><td>14.26</td><td>49.55</td><td>17.27</td><td>27.78</td><td>45.79</td><td>27.78</td><td>43.54</td><td>21.77</td><td>26.32</td></t<>	30	33.03	20.28	26.28	14.26	49.55	17.27	27.78	45.79	27.78	43.54	21.77	26.32
2.4.7.7.         4.5.4.         4.5.5	10	24.77	42.04	69.82	30.78	34.53	28.53	26.78	29.78	38 29	26.28	54.05	20.02
4.7.7         4.344         3.62         2.7.7         4.344         3.62         2.7.7         4.344         3.62         2.7.7         4.344         3.62         2.7.7         4.344         3.62         2.7.7         4.62         2.7.7         4.62         2.7.7         4.62         2.7.7         4.62         2.7.7         4.62         2.7.7         4.62         3.62         4.7.7         3.62         4.7.7         3.62         4.7.7         3.62         4.7.7         3.62         4.7.7         3.62         4.7.7         3.62         4.7.7         3.62         4.7.7         3.62         4.7.7         3.62         3.0.0         3.62         3.0.0         3.6.7 <t< td=""><td>-</td><td>26.28</td><td>50.30</td><td>25.53</td><td>18.02</td><td>12.76</td><td>22.52</td><td>72.82</td><td>24.77</td><td>36.79</td><td>102.85</td><td>27.03</td><td>17.27</td></t<>	-	26.28	50.30	25.53	18.02	12.76	22.52	72.82	24.77	36.79	102.85	27.03	17.27
18.77         26.22         21.77         14.22         17.27         37.78         16.22         75.79         16.22         75.79         16.22         75.79         16.22         75.70         17.27         37.74         14.22         17.27         37.74         14.22         17.27         37.74         14.22         17.27         37.54         17.27         37.74         17.27         37.74         17.27         37.74         17.27         37.74         17.27         37.74         17.27         37.74         17.27         37.74 <th< td=""><td>12</td><td>24.77</td><td>43.54</td><td>38.29</td><td>27.03</td><td>16,52</td><td>22.52</td><td>26.28</td><td>24.77</td><td>36.79</td><td>30.03</td><td>51.80</td><td>43.54</td></th<>	12	24.77	43.54	38.29	27.03	16,52	22.52	26.28	24.77	36.79	30.03	51.80	43.54
21.77         64.52         28.28         10.51         30.03         30.78         88.29         66.07         87.44         14.26         50.30           21.77         66.85         35.54         10.57         10.57         10.57         11.27         30.30         11.25         30.30         11.25         31.02           59.79         27.54         17.27         26.53         17.27         18.57         11.27         30.30         11.55         21.02         26.53         27.102         26.5	13	18.77	26.28	21.77	14.26	17.27	27.78	16.52	75.07	108.86	51.80	14.26	60'06
27.79         96.82         38.79         73.57         11.27         26.80         17.77         36.80         19.77         33.03         36.80         37.78         19.57         33.03         36.79         19.57         33.03         36.70         19.77         34.53         20.27         26.53         36.70         19.77         31.00         30.70         19.57         34.53         20.27         20.27         20.27         20.27         20.27         26.53         27.70         26.53         27.70         26.53         27.70         26.53         27.70         20.27         20.28         20.27         20.28         20.27         20.28         20.27         20.28         20.27 <th< td=""><td>14</td><td>21.77</td><td>34.53</td><td>26.28</td><td>10.51</td><td>30.03</td><td>30.78</td><td>38.29</td><td>69.07</td><td>87.84</td><td>14.26</td><td>50.30</td><td>42.04</td></th<>	14	21.77	34.53	26.28	10.51	30.03	30.78	38.29	69.07	87.84	14.26	50.30	42.04
87.8         75.44         71.24         78.53         34.55         20.27         24.77         18.02         20.27         21.02         20.28         21.02         21.02         20.28         21.02         21.02         21.02         22.53         71.02         22.53         71.02         22.53         71.02         22.53         71.02         22.53         71.02         22.53         71.02         22.53         71.02         22.53         21.02         22.53         21.02         22.53         21.02         22.53         21.02         22.53         21.02         22.53         21.02         22.53         21.02         22.53         22.10         46.54         22.53	15	27.78	66.82	36.79	73.57	11.26	17.27	67.57	54.80	27.78	15.77	33.03	75.07
57.81         26.28         91.56         41.28         18.02         22.57         27.03 <th< td=""><td>16</td><td>39.79</td><td>37.54</td><td>17.27</td><td>28.53</td><td>34.53</td><td>20.27</td><td>29.28</td><td>36.04</td><td>33.03</td><td>19.52</td><td>21.02</td><td>26.28</td></th<>	16	39.79	37.54	17.27	28.53	34.53	20.27	29.28	36.04	33.03	19.52	21.02	26.28
10.02         28.55         10.57         33.76         10.57         33.76         27.53         27.57         27.55         27.57         27.55         27.57         27.55         27.57 <th< td=""><td>17</td><td>57.81</td><td>26.28</td><td>91.59</td><td>41.29</td><td>18.02</td><td>22.52</td><td>24.77</td><td>18.02</td><td>20.27</td><td>25.53</td><td>27.03</td><td>29.28</td></th<>	17	57.81	26.28	91.59	41.29	18.02	22.52	24.77	18.02	20.27	25.53	27.03	29.28
19.52	9	21.02	25.53	70.57	33.78	15.77	34.53	48 80	45.79	21.02	26.28	25.53	43.54
15.51   11.11   22.52   27.03   27.78   27.79   27.27   11.25   11.2	19	19.52	29.28	16.52	24.77	27.03	60.06	23.27	25.53	24.77	48.80	27.78	21.77
1,000, 1,000,	20	13.51	111.11	52.55	35.79	24.77	23.27	13.51	18.//	23.30	18.02	32.28	20.27
55.28         54.55         39.29         30.00         45.04         11.26         71.32         46.32         51.30         36.73         36.74         11.26         71.32         46.32         51.30         36.74         27.03         36.74         27.03         36.74         27.03         36.74         27.03         36.74         27.03         36.74         37.04         36.75         47.57         6.20         27.03         36.74         37.04         36.75         47.57         6.20         27.03         47.57         48.58         47.57         6.20         47.57         47.57         48.58         26.53         47.57         48.59         48.59         48.59         48.59         47.57         48.59         48.59         48.59         48.59         48.59         47.57         48.59         48	17	10.01	99.10	22.78	20.72	18.57	24.02	75.07	24.63	12.51	49.00	94.09	33.20
25.52         27.73         18.02         58.31         39.04         39.04         25.53         47.30         63.06         36.04         36.04           30.78         27.78         18.02         25.30         26.27         26.27         26.27         26.27         26.27         26.27         26.27         36.04         36.	23	35.28	34 53	38.29	30.03	45.04	11.26	71.32	16.52	51.80	36.79	27.03	66.06
30.76         27.78         34.53         33.00         21.77         33.76         63.30         67.57         88.59         44.29         78.83           27.78         18.02         2.92.89         2.62.89         26.28         26.28         26.28         15.77         22.52         30.78         15.77         15.77         16.07         12.01         12.06         12.07 <td< td=""><td>24</td><td>22.52</td><td>27.03</td><td>18.02</td><td>56.31</td><td>39.04</td><td>39.04</td><td>25.53</td><td>47,30</td><td>24.02</td><td>63.06</td><td>36.04</td><td>24.77</td></td<>	24	22.52	27.03	18.02	56.31	39.04	39.04	25.53	47,30	24.02	63.06	36.04	24.77
13.51         43.54         26.28         26.28         26.28         26.28         26.28         41.29         26.53         15.01         22.52         30.78           2.77         12.07         12.01         12.07         12.02         12.02         12.02         12.02         12.02         12.0	25	30.78	27.78	34.53	33.03	21.77	33.78	53.30	67.57	88.59	44.29	78.83	45.04
15.77         18.02         12.76         11.2.01         12.76         31.53         18.77         76.58         25.53         12.76         41.29           20.27         20.27         20.27         12.01         12.76         16.25         30.27         12.01           20.27         38.03         47.30         16.27         20.27         47.30         16.27         12.01           20.27         38.04         76.52         11.26         48.80         18.77         45.90         10.51         20.27         12.01           20.28         27.03         26.53         61.56         48.80         36.79         27.77         24.02         45.04         45.04         45.04         45.04         45.04         45.04         45.04         45.00         14.26         14.26         14.26         14.26         14.26         14.26         14.26         14.26         14.26         14.26         14.26         14.26         16.52         20.30         30.78         30.04         41.06         41.29         41.29         41.29         41.29         41.29         41.29         41.26         41.29         41.29         41.12         41.29         41.29         41.29         41.29         41.29	26	13.51	43.54	26.28	29.28	26.28	26.28	41.29	28.53	15.01	22.52	30 78	30,03
15.77         28.53         34.53         16.52         20.27         55.55         39.04         20.28         66.22         12.01           26.28         27.03         34.53         11.56         16.77         48.80         18.77         45.54         42.04         47.54         61.06         26.28         39.79           26.28         27.03         47.30         11.51         16.77         43.54         42.04         43.54         27.78         60.06         16.28           26.28         27.03         24.77         13.51         14.62         48.00         36.64         27.78         60.06         14.26           26.28         21.77         21.77         24.77         27.78         60.06         14.26         46.04         27.78         60.06         14.26           26.28         21.77         24.74         45.64         26.28         50.30         24.77         51.02         26.28         39.04         41.06         46.04         37.54         60.06         14.20         45.04         26.28         60.06         14.20         46.04         26.28         39.04         41.06         60.06         14.20         46.04         27.63         46.04         27.78	27	27.78	18.02	12.01	12,01	12.76	31.53	18.77	76.58	25.53	12.76	41.29	13.51
20.27         39.04         75.82         11.26         15.77         48.80         18.77         45.79         10.51         35.28         39.79           20.27         39.04         75.82         11.26         14.26         15.77         48.80         10.61         35.40         24.72           27.03         25.53         63.06         24.77         24.77         24.02         24.02           16.52         17.7         19.52         13.77         27.77         24.02         48.90           26.53         20.53         39.04         34.53         45.04         26.30         20.06         14.26           28.53         23.27         35.28         39.04         34.53         45.04         26.30         20.78         60.06         14.26           28.53         23.27         35.28         30.78         21.77         37.54         12.76         16.52         29.28         21.77         91.59           28.53         23.27         36.04         37.54         12.76         16.52         29.28         21.77         91.80           28.53         23.27         36.04         41.26         26.28         86.33         46.54         17.77         27.02 <td>28</td> <td>15.77</td> <td>28.53</td> <td>34.53</td> <td>16.52</td> <td>20.27</td> <td>52.55</td> <td>39.04</td> <td>26.28</td> <td>66.82</td> <td>20.27</td> <td>12.01</td> <td>53.30</td>	28	15.77	28.53	34.53	16.52	20.27	52.55	39.04	26.28	66.82	20.27	12.01	53.30
26.28         27.03         47.30         43.51         18.77         43.54         42.04         43.54         81.08         48.80         28.28           27.03         24.73         24.77         24.77         48.54         42.04         43.54         21.77         24.02           16.52         12.76         21.77         14.26         13.51         11.26         48.80         36.44         21.77         24.02           16.52         12.77         21.77         21.77         24.77         24.02         45.04         26.28         21.77         24.02         45.04         24.02         24.02         45.04         24.02         24.02         45.04         24.02         24.02         45.04         24.02	29	20.27	39.04	75.82	11.26	15.77	48.80	18.77	45.79	10.51	35.28	39.79	91.59
25.53         63.06         24.77         14.26         14.56         15.80         44.54         21.77         27.03         24.02           26.28         12.17         14.26         13.51         14.26         14.88         36.78         60.06         14.26           26.28         21.77         14.26         25.53         45.04         26.28         39.04         81.06           38.78         21.77         21.77         53.30         61.56         10.135         60.81         24.02         45.04           28.53         25.27         38.04         34.53         12.76         50.28         50.88         21.77         31.02           28.53         22.27         26.28         30.04         14.26         26.28         86.38         29.28         21.77         31.50           29.28         22.27         26.28         41.29         14.26         26.28         86.38         21.77         31.50         21.77           29.28         21.77         34.53         44.05         29.28         21.77         31.29         21.77         31.29           29.28         21.77         34.29         44.25         46.54         46.54         46.54         47.04 </td <td>90</td> <td>26.28</td> <td>27.03</td> <td>47.30</td> <td>13.51</td> <td>18.77</td> <td>43.54</td> <td>45.04</td> <td>37.54</td> <td>81.08</td> <td>48.80</td> <td>26.28</td> <td>21.02</td>	90	26.28	27.03	47.30	13.51	18.77	43.54	45.04	37.54	81.08	48.80	26.28	21.02
26.28         12.78         21.77         14.26         14.86         48.80         36.79         27.78         60.06         14.26           26.28         21.77         21.77         21.57         25.53         45.04         26.28         13.61         24.02         45.04         41.06           39.79         25.53         39.04         35.30         21.77         21.77         53.30         61.56         101.35         60.81         24.02         45.04         45.04         45.04         61.56         60.81         24.02         45.04         45.04         45.04         101.35         60.30         30.78         24.02         45.04         45.04         45.04         101.35         60.30         30.78         24.77         31.02         24.77         31.62         24.77         30.78         24.77         24.24         45.05         60.30         30.78         24.77         31.62         26.28         60.30         20.78         60.81         24.02         24.77         31.02         24.77         31.06         24.77         24.78         36.30         24.77         31.06         24.77         24.74         26.28         26.30         20.78         26.00         21.77         26.28         26.3	31	27.03	25.53	63.06	24.77	24.77	19.52	51.80	43.54	21.77	27.03	24.02	33.03
26.28         21.77         19.52         21.77         25.53         45.04         26.28         13.51         76.58         39.04         46.106           17.27         23.03         39.04         21.77         21.77         21.77         21.77         45.04         46.04         24.02         46.04         24.02         46.04         21.07         46.04         21.07         46.04         21.07         46.04         21.07         46.04         24.02         46.04         24.07         46.04         24.07         46.04         24.02         46.04         24.02         46.04         24.02         46.04         24.02         46.04         24.02         46.04         24.02         46.04         24.02         46.04         24.02         46.04         24.02         46.04         24.02         46.02         24.02         46.04         24.02         46.04         24.02         46.02         24.02         46.02         24.07         46.02         24.07         46.02         24.07         46.02         24.07         46.04         24.07         46.02         24.07         46.02         24.04         46.02         24.04         46.02         24.04         46.03         26.03         46.04         46.03         46	32	16.52	12.76	21.77	14.26	13.51	11.26	48.80	36.79	27.78	90.09	14.26	59.31
39.79         25.53         39.85         27.77         27.77         27.77         27.77         27.77         27.77         27.54         61.56         107.35         60.81         24.02         45.04           28.53         23.27         35.28         39.04         34.53         14.26         58.56         68.32         50.78         60.81         24.02         86.34         21.77         91.59         20.78         21.77         91.50         20.78         21.77         91.50         20.28         60.78         20.78         21.77         91.50         20.78         21.77         20.27         20.28         21.77         20.27         20.28         21.77         20.27         20.28         21.05         75.82         75.86         20.68         21.77         50.28         20.78         15.05         75.87         75.87         75.78         20.28         20.78         15.07         42.09         20.78         20.28         21.77         20.27         20.28         20.86         20.68         21.77         20.27         20.28         20.86         20.69         20.77         20.27         20.28         20.28         20.86         20.60         20.78         20.28         20.28         20.28         20	33	26.28	21.77	19.52	13.51	25.53	45.04	26.28	13.51	76.58	39.04	81.08	21.77
17.27         33.743         39.04         30.744         34.73         14.26         35.50         30.30         30.48         37.10         30.48         37.10         31.10         30.71         31.02         30.30         30.78         30.30         <	45	39.79	25.53	99.85	21.77	21.17	53.30	02.70	101.35	60.81	24.02	45.04	33.03
46.55         2.4.77         33.78         36.70         4.1.7         37.34         18.70         4.2.70         18.70         4.2.70	35	17.27	33.03	39.04	25.45	14.20	38.35	10.32	20.30	30.78	60.81	21.02	59.31
23.27         26.28         52.56         41.26         14.26         16.52         86.33         18.37         19.32         19.30 <th< td=""><td>30</td><td>20.02</td><td>25.27</td><td>33.20</td><td>30.70</td><td>11.17</td><td>90.00</td><td>0/7/0</td><td>10.32</td><td>23.20</td><td>20.00</td><td>91.09</td><td>10.7</td></th<>	30	20.02	25.27	33.20	30.70	11.17	90.00	0/7/0	10.32	23.20	20.00	91.09	10.7
19.52         78.83         16.52         57.81         34.53         54.05         29.28         51.05         75.82         76.58         32.28           60.06         27.78         27.78         33.03         10.51         50.30         99.10         46.55         54.80         18.02           26.08         27.78         27.78         33.03         10.51         50.30         99.10         46.55         54.80         18.02           26.08         27.73         15.01         25.53         10.51         22.65         50.30         20.27         30.03         36.79         33.78         14.26           27.03         17.27         44.29         21.02         25.53         50.30         20.27         30.03         36.79         33.78         14.26           26.27         30.03         54.06         25.53         68.32         17.27         42.79         18.52         30.78         69.82           26.26         45.54         18.02         25.53         68.32         17.27         41.29         24.77         27.78         68.31           26.27         18.01         28.25         18.02         28.53         36.04         27.73         36.74         28.5	38	23.27	26.28	52.75	41.20	14.26	16.52	86.33	28.53	125.37	20.20	57.06	23.78
60.06         27.03         27.78         33.03         10.51         50.30         99.10         46.55         54.80         18.02           26.28         40.54         46.79         15.01         73.57         77.78         36.79         99.10         46.55         54.80         18.02           27.03         47.77         36.04         32.74         36.79         36.79         36.79         33.78         30.78           27.03         17.27         44.29         21.02         25.53         50.30         20.27         30.03         36.79         33.78         36.04           20.27         20.27         20.27         30.03         36.79         33.78         36.04         36.04           20.27         20.27         30.03         36.79         37.78         42.79         14.29         24.77         27.78         36.79         39.79         27.78           20.27         20.27         42.79         14.29         24.77         27.78         24.77         27.77         27.78         36.04         27.77         27.78         24.77         27.78         24.77         27.78         24.77         27.78         24.77         27.78         24.77         27.78	39	19.52	78.83	16.52	57.81	34.53	54.05	29.28	51.05	75.82	76.58	32.28	33.78
26.28         40.54         45.79         15.01         73.57         27.78         36.79         28.53         35.28         21.02         42.04           60.06         72.03         72.28         21.77         44.29         21.77         44.29         33.78         14.26         30.04         82.58         72.07         68.32         30.78           27.03         15.01         26.28         21.02         25.53         63.00         20.27         30.03         36.79         68.32         30.78           20.27         20.28         21.02         25.53         64.05         27.78         42.04         28.53         36.79         36.79         36.04           20.27         20.28         20.29         27.78         42.04         28.53         37.78         36.04           20.57         15.01         27.78         48.05         84.08         38.04         27.78         66.31           45.62         26.28         16.05         75.82         17.27         41.29         24.77         27.78         66.31           50.29         16.05         26.53         16.26         27.81         21.02         27.78         48.33         21.74         27.78         48.3	40	90.09	27.03	27.78	27.78	33.03	10.51	50.30	99.10	46.55	54.80	18.02	15.77
60.06         21.77         36.04         32.28         21.77         14.26         39.04         82.58         72.07         68.32         30.78           27.03         17.27         44.29         21.02         25.53         50.30         30.03         30.03         30.78         14.26           20.78         15.01         26.28         30.03         54.05         12.78         42.79         19.52         28.53         30.78         36.74           20.27         25.53         21.02         27.78         42.04         28.53         37.78         39.79         27.78         36.82           20.27         22.52         12.02         12.76         42.04         28.53         27.78         36.82         27.78         36.82         27.78         36.82         27.78         36.82         27.78         42.79         27.78         42.79         27.78         42.79         27.78         42.79         27.78         42.79         27.78         42.79         27.78         42.79         27.78         42.79         27.78         42.79         27.78         42.79         27.78         42.79         27.78         42.79         27.78         42.79         27.73         27.73         27.73	41	26.28	40.54	45.79	15.01	73.57	27.78	36.79	28.53	35.28	21.02	42.04	42.79
27.03         17.27         44.29         25.53         50.30         20.27         30.03         36.79         33.78         14.26           30.73         17.27         26.28         21.02         25.53         50.30         20.27         20.27         20.55         20.77         20.27         20.55         20.77         20.76         20.79         33.78         30.78         36.04           25.53         21.02         22.52         12.76         42.79         19.52         27.78         30.79         27.03         27.03           60.27         22.52         12.76         42.79         28.53         33.78         30.78         69.82         27.77         42.79         27.78         48.09         88.00         24.77         27.78         69.82         26.31         27.78         48.06         84.06         21.02         37.54         27.03         42.79         27.73         42.79         27.73         42.79         27.77	42	90.09	21.77	36.04	32.28	21.77	14.26	39.04	82.58	72.07	68.32	30.78	50.30
26.27         2.0.76         36.74         26.75         36.74         36.04           26.27         2.0.27         26.28         22.52         12.76         42.79         28.53         36.04           20.27         2.0.27         26.52         18.02         25.53         68.32         17.27         41.29         24.77         27.78         69.82           64.56         15.77         42.64         28.53         36.04         27.78         69.82         24.77         27.78         68.31         27.78         48.06         84.08         38.04         27.78         42.79         27.78         42.79         27.78         42.79         27.78         42.79         27.78         42.79         27.78         42.79         27.78         42.79         27.78         42.79         27.78         42.79         27.78         42.79         27.78         42.79         27.78         42.54         47.45         47.45         36.71 <td>43</td> <td>27.03</td> <td>17.27</td> <td>44.29</td> <td>21.02</td> <td>25.53</td> <td>50.30</td> <td>20.27</td> <td>30.03</td> <td>36.79</td> <td>33.78</td> <td>14.26</td> <td>25.53</td>	43	27.03	17.27	44.29	21.02	25.53	50.30	20.27	30.03	36.79	33.78	14.26	25.53
20.27         21.52         30.70         4.0.20         25.53         68.32         17.04         20.23         23.70         27.78         69.82           64.56         15.77         22.52         19.52         18.02         25.53         68.32         17.04         23.78         27.78         68.32         17.04         28.27         27.78         69.82         14.26         21.02         37.54         27.78         66.31         27.78         48.08         38.04         28.27         42.79         42.74         36.71         36.71         36.71         36.71         36.74         36.71         36.71         36.75         42.54         47.45         36.71         36.71         36.71         36.71         36.71         36.71         36.71         36.71         36.71         36.71         36.71         36.71         36.71         36	44	30.78	10.01	20.28	30.03	24.03	17.78	42.79	19.52	28.53	30.78	36.04	5/81
64.56         15.77         42.79         15.01         27.78         48.05         84.08         36.04         28.53         30.78         65.31           50.30         15.01         138.14         25.53         31.53         66.82         14.26         21.02         37.54         27.03         42.79           75.82         26.28         18.02         30.03         66.83         18.02         37.54         27.03         42.79           18.77         37.54         34.53         16.52         54.05         28.53         17.76         27.78         66.31         31.53         21.77           30.27         33.74         38.30         28.27         26.41         33.32         39.71         40.45         47.45         36.71         36.71           34.10         29.33         29.33         42.54         37.54         38.71         38.11	46	20.02	22.02	10.52	18.02	25.32	68.32	17.27	41.20	24.77	27.78	60.82	26.26
50.30         15.01         138.14         25.53         31.53         66.82         14.26         21.02         37.54         27.03         42.79           75.82         26.28         18.02         30.03         60.06         75.82         57.81         53.30         65.31         31.53         21.77           18.77         37.54         34.53         16.52         54.05         28.53         12.76         27.78         79.58         60.06         25.53           30.27         33.74         38.30         28.27         26.41         33.32         39.71         40.45         47.45         36.71         36.71         38.15           34.10         29.33         29.33         42.54         37.54         38.71         38.11	47	64.56	15.77	42.79	15.01	27.78	48.05	84.08	36.04	28.53	30.78	65.31	14.26
75.82         26.28         18.02         30.03         60.06         75.82         67.81         63.30         65.31         31.53         21.77           18.77         37.54         34.53         16.52         54.06         28.53         12.76         77.78         79.58         60.06         25.53           30.27         33.74         38.30         28.27         26.41         33.32         39.71         40.45         47.45         36.71         38.65           34.10         34.10         29.33         29.31         42.54         47.45         36.71         38.71	48	50,30	15.01	138.14	25.53	31.53	66.82	14.26	21.02	37.54	27.03	42.79	45.04
18.77   37.54   34.53   16.52   54.05   28.53   12.76   27.78   79.58   60.06   25.53   30.27   33.74   38.30   28.27   26.41   33.32   39.71   40.45   47.45   36.71   36.65   36.71   36.65   34.10   29.33   42.54   42.54   38.11	49	75.82	26.28	18.02	30.03	90'09	75.82	57.81	53.30	65.31	31,53	21.77	36.79
30.27 33.74 38.30 28.27 26.41 33.32 39.71 40.45 47.45 36.71 36.65 36.51 34.10 29.33 29.31 42.54 42.54 34.10 38.11	20	18.77	37.54	34.53	16.52	54.05	28.53	12.76	27.78	79.58	90.09	25.53	25.53
34.10 29.33 42.54	Mean/slide	30.27	33,74	38,30	28,27	26.41	33.32	39.71	40.45	47.45	36.71	36.65	40,96
	Mean/animal		34 10			20 22			72 57			7	

BC-07-1284   228	Dose: Animal N°	100 mg/kg/day (	day (x2) <b>6527</b>			6259	2" treatment:		26/09/2007 <b>6526</b>			6530	
1.   1.   1.   1.   1.   1.   1.   1.	lo. BC-07-	228 A	228 B	228 C	229 A	229 B	229 C	230 A	230 B	230 C	231 A	231 B	231 C
1,446   1,546   1,546   1,546   1,546   1,546   1,546   1,546   1,44	3C-07-13	Ξ	12	13	P	P2	P3	M1	M2	M3	H	H2	뛴
The color of the	, BC-07-13	I1.xls	l2.xls	3.xls	P1.xls	P2.xls	P3.xls	M1.xls	M2.xls	M3.xls	H1.xls	H2.xls	H3.xls
1,000	cell		I all length			l ail length			l all length			l ail length	
1979   1970	-	27.03	26.28	74.32	27.03	15.01	143.39	33.78	39.04	34.53	35.28	28.53	12.76
1,000,	7	9.76	27.03	70.08	48.33	22.08	30.04	18.70	28.53	37.34	20.28	28.89	36.04
1,000	0	30.04	40.34	20.04	40.00	33.03	30.79	26.04	07.07	20.02	97.54	27.17	42.73
Color	<b>1</b> L	50.30	31.53	47.30	18 77	83.33	27.72	25.53	18.02	65.31	32.24	75.07	43.04
22.23         16.05         6.76         4.204         17.64         13.54         23.00         17.27         44.29         23.73         45.64           22.23         18.00         26.00         13.75         13.54         23.00         17.67         17.64         23.00         17.67         17.64         23.00         17.67         17.67         28.00         17.67         17.67         28.00         17.67         17.67         18.69         18.6	9	108.86	18.02	15.01	28.53	14.26	17.27	22.52	24.77	101.35	40.54	111.11	71.32
25.22         11.07         26.04         33.70         4.71         11.346         21.02         44.25         30.04         31.50         46.44         45.04 <th< td=""><td>-</td><td>29.28</td><td>51.05</td><td>6.76</td><td>42.04</td><td>97.60</td><td>37.54</td><td>33.03</td><td>17.27</td><td>44.29</td><td>27.78</td><td>45.04</td><td>54.80</td></th<>	-	29.28	51.05	6.76	42.04	97.60	37.54	33.03	17.27	44.29	27.78	45.04	54.80
25.53         21.77         25.54         21.77         25.55         21.77         25.55         21.77         25.55         21.77         25.55         21.77         25.55         25.77 <th< td=""><td>8</td><td>32.28</td><td>18.02</td><td>36.04</td><td>33.03</td><td>24.77</td><td>113.36</td><td>21.02</td><td>44.29</td><td>26.28</td><td>33.78</td><td>45.04</td><td>30.78</td></th<>	8	32.28	18.02	36.04	33.03	24.77	113.36	21.02	44.29	26.28	33.78	45.04	30.78
7.7.8         1.7.6         9.7.6         57.8         3.5.0         6.6.2         2.5.0         9.6.4         2.6.2         6.0.7           7.7.8         1.2.7         3.0.7         2.4.7         10.7.8         22.5         25.5         26.2         10.7.8         9.6.7         10.7.8         9.6.7         10.7.8         9.6.7         10.7.8         9.6.7         10.7.8         9.6.7         10.7.8         9.6.7         10.7.8         9.6.7         10.7.8         9.6.7         10.7.8         9.6.7         10.7.8	6	25.53	21.77	22.52	33.78	88.59	62.31	93.84	27.78	63.06	39.04	31.53	46,55
62.28         12.76         50.003         24.77         10.736         28.28         28.28         64.00         21.70         20.003         24.77         10.736         28.28         28.28         64.00         21.00         20.003         24.77         10.003         28.28         22.00         28.28         63.00         28.28	10	27.78	9.76	57.81	33.03	66.82	33.03	90.84	26.28	87.84	26.28	69.07	50.30
51 0.5	11	26.28	12.76	30.03	24.77	107.36	26.28	22.52	26.28	84.08	21.02	82.62	63.06
18.77   35.00   82.56   92.56   92.50   42.04   52.28   44.80   47.30   11.26   39.79   40.54   30.70   40.54   30.70   40.55   30.70   40.54   30.70   40.54   30.70   40.54   30.70   30.7	12	51.05	46.55	27.78	45.79	45.04	12.01	39.04	26.28	68,32	73.57	15.01	125.37
30.78         40.55         20.29         61.56         72.28         60.07         82.56         57.81         33.03         20.27         75.71           30.78         21.02         27.02         40.52         27.02         40.52         27.02         40.52         27.02         40.52         27.02         40.52         27.02         40.52         27.02         40.52         27.02         40.52         27.02         40.52         27.02         40.52         27.02         40.52         27.02         40.52         27.02         40.52         27.02         40.52         27.02         40.52         27.02         40.52         40.	13	18.77	33.03	82.58	32.28	45.04	29.28	48.80	47.30	11.26	39.79	40.54	57.81
2.1.02         2.1.03<	14	30.78	46.55	26.28	61.56	32.28	69.07	82.58	57.81	33.03	20.27	36.79	26.28
49.56         39.73         37.54         40.54         80.33         20.27         10.51         10.51         10.55         40.29         40.55         40.29         40.55         40.20         40.55         40.55         40.55         40.55         40.55         40.55         40.55         40.55         40.55         40.56         30.77         27.78         40.55         30.78         10.50         20.55         50.50         40.55         30.78         10.50         10.50         10.50         10.50         10.50         20.55         30.00         30.77         27.78         96.00         36.04         36.50         40.55         30.00         30.78         30.78         30.59         30.50         30.50         20.77         27.78         96.00         30.04         40.50         30.04         40.50         30.04         40.50         30.04         40.50         40.50         30.04         40.50 <th< td=""><td>15</td><td>21.02</td><td>27.03</td><td>69.82</td><td>27.03</td><td>78.08</td><td>27.03</td><td>49.55</td><td>22.52</td><td>46.55</td><td>70.57</td><td>25.53</td><td>126.87</td></th<>	15	21.02	27.03	69.82	27.03	78.08	27.03	49.55	22.52	46.55	70.57	25.53	126.87
16.55   313.78   51.80   2.553   54.05   25.28   62.31   24.77   27.78   96.09   96.81   96.05   96.	16	33.03	27.03	37.54	40.54	80.33	20.27	10.51	101.35	21.77	55.55	41.29	25 53
1,000   1,00	17	49.55	33.78	51.80	25.53	54.05	26.28	62.31	24.77	27.78	44.29	84.83	64.56
66.06         66.51         68.82         69.81         22.82         60.08         68.40         88.93         60.08         64.05         7.77         64.05         7.77         64.05         7.87         64.05         7.87         64.05         7.87         42.79         36.74         42.79         36.70           4.87         4.63         1.03         1.03         1.03         4.64         1.03         1.03         6.40         4.88         6.64         6.67         1.03         6.40         1.03         6.67         1.03         6.67         1.03	18	16.52	31.53	45.79	14.26	56.31	45.04	30.78	31.53	203.45	18.77	21.77	21.02
30.78         96.34         25.53         35.28         81.08         52.52         69.06         14.26         13.51         42.67         42.79         42.67         42.67         42.67         42.67         42.67         42.67         42.67         42.67         42.79         42.70         40.64         42.67         42.67         42.70 <th< td=""><td>19</td><td>90.99</td><td>65.31</td><td>63.81</td><td>18.02</td><td>30.78</td><td>30.03</td><td>21.77</td><td>27.78</td><td>96.09</td><td>36.04</td><td>36.04</td><td>90.84</td></th<>	19	90.99	65.31	63.81	18.02	30.78	30.03	21.77	27.78	96.09	36.04	36.04	90.84
42.76         36.76         36.55         36.31         28.53         24.77         36.70         36.70         36.70         36.70         36.70         36.70         46.70         36.70         46.70         36.70         46.70         36.70         46.70         36.70         46.70         36.70         46.70         36.70         46.70         36.70         46.70         36.70         46.70         36.70         46.70         36.70         36.70         36.70         36.70         46.70         36.70         46.70         36.70         46.70         36.70         46.70         36.70         46.70         36.70         46.70         36.70         36.70         46.70         36.70 <th< td=""><td>20</td><td>30.78</td><td>95.34</td><td>25.53</td><td>35.28</td><td>81.08</td><td>22.52</td><td>90.09</td><td>14.26</td><td>13.51</td><td>36.04</td><td>28.53</td><td>24.02</td></th<>	20	30.78	95.34	25.53	35.28	81.08	22.52	90.09	14.26	13.51	36.04	28.53	24.02
4.5.76         4.0.76         1.1.5         4.2.71         54.00         1.1.5         4.5.70 <td>21</td> <td>100.60</td> <td>89.34</td> <td>48.05</td> <td>27.03</td> <td>30.03</td> <td>55.55</td> <td>59.31</td> <td>25.53</td> <td>24.77</td> <td>42.79</td> <td>36.79</td> <td>69.82</td>	21	100.60	89.34	48.05	27.03	30.03	55.55	59.31	25.53	24.77	42.79	36.79	69.82
42,79         40,244         40,244         11,186         92,244         94,194         43,244         94,104         43,244         94,104         43,244         94,104         43,244         94,104         44,254         11,186         96,104         94,244         94,214         94,234         11,214         12,103         90,104         43,244         94,534         13,134         13,147         13,147         13,147         13,147         13,147         13,147         13,147         14,244 </td <td>22</td> <td>34.53</td> <td>30.78</td> <td>101.35</td> <td>12.01</td> <td>54.05</td> <td>126.12</td> <td>33.03</td> <td>54.05</td> <td>21.02</td> <td>36.04</td> <td>45.79</td> <td>42.79</td>	22	34.53	30.78	101.35	12.01	54.05	126.12	33.03	54.05	21.02	36.04	45.79	42.79
50.01         2.7.03         3.5.03         3.4.5.3         3.4.5.3         3.4.5.3         3.4.5.3         3.1.03         3.1.03         3.5.03         9.00 <t< td=""><td>53</td><td>42.79</td><td>40.54</td><td>111.86</td><td>92.34</td><td>24.80</td><td>31.53</td><td>18.02</td><td>27.03</td><td>90.09</td><td>43.54</td><td>36.79</td><td>52.55</td></t<>	53	42.79	40.54	111.86	92.34	24.80	31.53	18.02	27.03	90.09	43.54	36.79	52.55
12.01         53.02         30.04         33.52         40.53         20.35         20.35         20.35         40.64         30.04         40.64         30.04         40.64         30.04         40.64 <th< td=""><td>24</td><td>30.03</td><td>27.03</td><td>33.03</td><td>26.28</td><td>34.53</td><td>74.32</td><td>31.53</td><td>21.02</td><td>84.83</td><td>13.51</td><td>69.07</td><td>34.53</td></th<>	24	30.03	27.03	33.03	26.28	34.53	74.32	31.53	21.02	84.83	13.51	69.07	34.53
36.70         47.54         27.78         50.49         27.78         50.40         27.78         50.40         27.78         40.54         27.70         11.11         20.30         37.54         40.54         27.03         38.29         37.54         40.54         37.54         37.54         30.03           4.0.78         55.56         27.703         90.84         38.29         30.73         11.261         75.82         66.82         30.03           2.0.78         55.26         27.703         45.79         42.04         72.82         11.261         75.82         66.66         82.23         30.03         11.261         75.82         57.81         66.66         82.20         11.261         75.82         75.81         66.66         12.77         12.78         14.26         18.78         14.26         18.78         14.26         18.78 <td< td=""><td>0,4</td><td>0.00</td><td>33.03</td><td>20.70</td><td>25.53</td><td>70.03</td><td>26.33</td><td>40.00</td><td>33.78</td><td>147.49</td><td>27.03</td><td>29.28</td><td>37.34</td></td<>	0,4	0.00	33.03	20.70	25.53	70.03	26.33	40.00	33.78	147.49	27.03	29.28	37.34
30.78         55.26         27.70         90.20         25.26         90.27         30.27         30.28 <th< td=""><td>76</td><td>20.70</td><td>72.67</td><td>27.70</td><td>20.00</td><td>20.00</td><td>27.54</td><td>40.05</td><td>20 70</td><td>20.00</td><td>27.64</td><td>40.00</td><td>00.02</td></th<>	76	20.70	72.67	27.70	20.00	20.00	27.54	40.05	20 70	20.00	27.64	40.00	00.02
47.30         33.28         45.79         48.80         42.04         78.38         27.77         11.801         66.82         15.01         37.54           47.30         33.28         45.79         42.04         78.38         27.77         11.61         66.82         15.01         37.54           24.02         18.02         30.78         89.54         12.76         18.77         35.28         14.26           28.76         18.02         30.78         22.28         35.28         10.57         35.28         14.26           28.28         54.80         14.26         38.79         47.29         47.14         53.30           117.87         31.53         54.80         53.30         33.78         47.29         15.71         25.28           29.28         11.78         45.79         45.79         47.30         57.78         47.30         57.78           29.28         11.78         45.79         47.30         57.78         47.30         57.78         47.30         57.78           29.28         11.18         45.79         45.79         47.30         57.78         47.30         57.78         47.30         57.78         47.30         47.79         47.29<	17	20.78	45.34	27.70	00.00	28.20	80.33	22.04	12 54	30.29	97.04	33.03	20.03
74.73         26.28         23.27         23.27         36.78         86.1.1         17.01         00.02         20.01         36.58         36.56         36.58         36.78         17.01         36.28         17.78         36.28         17.78         36.28         17.78         36.28         17.71         36.28         17.78         36.28         17.78         36.28         17.77         36.28         17.77         36.28         17.77         36.28         17.77         36.28         17.77         36.28         17.77         36.28         17.77         36.28         17.77         36.28         17.77         36.28         17.77         36.28         17.77         36.28         17.77         36.28         17.77         36.28         17.77         36.28         17.77         36.28         17.77         36.28         17.77         36.78 <t< td=""><td>200</td><td>47.30</td><td>26.30</td><td>45.70</td><td>70.07</td><td>20.52</td><td>20.30</td><td>27.72</td><td>143.64</td><td>13.02</td><td>15.04</td><td>33.03</td><td>20.00</td></t<>	200	47.30	26.30	45.70	70.07	20.52	20.30	27.72	143.64	13.02	15.04	33.03	20.00
24,702         18,02         30,03         21,02         30,03         21,02         30,03         26,56         55,56         35,28         70,57         13,51         27,78           22,72         57,81         39,79         36,79         50,30         20,28         35,03         110,36         44,29         15,77         54,80           22,28         57,81         38,79         36,79         37,8         41,29         22,28         15,77         45,79         147,14         53,30           117,67         31,53         54,80         57,80         47,29         27,78         46,79         147,14         53,00           24,02         24,02         24,02         15,07         42,29         15,07         45,79         147,14         53,00           24,02         24,02         16,77         46,29         17,36         36,28         70,58         46,59         147,14         53,00           24,02         27,03         45,79         46,50         10,61         10,61         10,61         10,61         10,61         10,61         10,61         10,61         10,61         10,61         10,61         10,61         10,61         10,61         10,61         10,61	30	72.83	24.77	26.28	23.27	22.04	30.78	80.34	12.76	18 77	35.38	14.06	62.30
29.79         57.81         39.79         36.79         56.30         29.28         43.29         170.36         44.29         15.71         54.10         54.10         54.10         55.10         56.06         57.06         56.30         26.28         15.01         147.14         53.00         17.27         47.30         26.28         36.78         47.30         26.28         36.78         47.30         26.28         36.79         47.30         26.28         36.79         47.30         26.28         36.79         47.30         27.02         27.02         47.30         27.22         <	3.5	24.02	18.03	30.03	21.02	30.03	58 56	55.54	35.70	70.57	13.50	07.76	18 77
22.52         54.80         14.26         38.29         30.78         32.28         44.29         21.03         26.28         57.81         66.06           29.22         51.50         33.30         33.78         41.29         32.28         15.77         45.79         147.14         66.06           29.22         24.02         27.03         44.29         173.60         56.30         35.28         15.77         46.56         35.30         27.02           24.02         27.03         47.09         44.29         173.60         56.30         35.28         15.77         75.82         24.02         27.03           24.02         27.03         43.54         51.06         56.30         35.28         15.77         75.82         35.30         37.8         24.02           60.06         27.03         43.54         51.06         15.61         36.30         37.8         47.30         27.72         36.30         37.8         37.73         36.30         37.8         48.59         36.30         37.8         37.73         36.30         37.8         37.3         37.3         37.3         37.3         37.3         37.3         37.3         37.3         37.3         37.3         37.3	3	30.70	57.81	39.70	36.79	50.30	29.28	33.03	110 36	44.20	15.51	24.70	50 5E
11787         31.53         54.80         55.30         33.76         41.29         32.28         15.77         45.79         147.14         53.30           29.28         45.79         75.82         47.30         27.78         47.30         27.78           24.02         54.80         45.79         103.60         56.34         29.28         15.01         75.82         47.30         27.78           24.02         54.80         142.6         46.61         56.15         59.39         19.24         46.55         24.02           24.02         54.80         14.26         46.61         56.16         59.30         38.79         43.54         25.53         23.77           10.8         11.86         45.79         147.14         195.19         79.58         36.79         47.30         36.79           60.6         11.8         75.57         46.80         16.77         39.79         27.03         36.79         47.30         36.79           60.8         11.8         75.6         80.6         15.0         38.79         27.03         31.53         23.27           77.33         26.28         16.70         83.79         27.03         31.53         47.30	33	22.52	54 80	14.26	38.29	30.78	32.28	44 29	27.03	26.28	57.81	86.06	24.33
29.28         45.79         72.82         51.80         57.06         95.34         29.28         15.01         75.82         47.30         27.78           24.02         57.03         45.79         103.60         57.06         95.34         25.28         15.01         75.82         47.30         27.78           24.02         27.03         43.54         51.05         14.28         16.61 5         38.78         78.58         36.58         36.78         36.78           60.06         27.03         43.54         51.05         15.07         38.79         42.59         36.79         36.70           60.08         27.03         47.27         48.80         14.74         15.07         38.30         31.53         47.30         36.79           77.33         25.53         73.57         56.28         48.80         86.58         30.78         47.30         47.30         47.29           50.30         42.79         147.14         195.19         27.72         78.83         47.30         47.29         47.29           50.30         42.79         48.83         39.79         27.72         48.89         47.30         47.30         47.29         47.29         47.29	34	117.87	31.53	54.80	53.30	33.78	41.29	32.28	15.77	45.79	147.14	53.30	43.54
24.02         27.03         87.09         44.29         103.60         50.30         35.28         19.52         46.55         35.28         24.02           24.02         54.02         44.29         103.60         50.30         35.28         49.54         35.79         24.02           60.06         55.06         45.06         156.15         94.09         76.07         39.79         43.54         25.53         23.27           138.89         111.86         45.79         19.28         37.54         56.56         15.01         17.27         90.84         36.73           77.31         25.53         77.57         27.03         27.55         53.30         31.53         42.79           77.31         25.53         77.57         78.83         48.83         14.29         47.30         36.40           77.32         25.53         17.57         78.83         77.30         47.30         36.40         47.30           16.22         60.81         30.79         78.57         27.78         78.83         14.29         57.57           22.52         60.81         38.79         23.27         28.55         18.77         47.29         47.29         57.65      <	35	29.28	45.79	72.82	51.80	57.06	95.34	29.28	15.01	75.82	47.30	27.78	38 29
24.02         54.80         14.26         48.80         156.15         94.59         79.56         43.54         25.53         23.27           60.06         27.03         47.74         49.54         77.54         81.64         26.53         23.27           138.0         47.73         45.74         19.52         37.54         86.56         15.07         83.33         31.53         71.32         34.73           60.81         31.53         45.76         19.52         37.54         15.07         83.33         31.53         71.32         34.73         34.74         34.74         34.74         34.74         34.74         34.74         34.84         36.33         34.73         34.74         34.74         34.84         36.33         34.74         34.74	36	24.02	27.03	87.09	44.29	103.60	50.30	35.28	19.52	46.55	35.28	24.02	99.10
60.06         27.03         43.54         51.05         81.08         75.07         39.79         27.03         17.27         90.84         36.79           138.89         111.86         45.79         1952         37.44         56.28         33.33         31.53         17.32         34.53           60.81         31.53         18.77         54.80         147.14         195.19         27.03         52.55         53.30         31.53         42.79           60.30         25.53         73.57         26.28         66.88         30.78         47.30         39.04           60.30         27.52         34.53         30.78         26.28         77.33         56.31         17.27         78.83         47.30         47.30         47.30           22.52         34.53         30.78         27.73         28.53         17.27         78.83         47.30         47.50         46.55         18.72         48.83         14.28         25.53         14.28         27.53         47.57         46.55         66.83         14.26         47.50         47.57         46.55         18.72         48.83         14.28         27.53         48.55         18.72         46.55         27.52         46.55	37	24.02	54.80	14.26	48.80	156.15	94.59	79.58	36.79	43,54	25.53	23 27	19.52
138.89         111.86         45.79         19.52         37.54         88.56         15.01         88.33         31.53         71.32         34.53           60.81         18.77         54.90         14.74         18.60         27.03         25.53         53.30         31.53         47.32         34.53           77.33         25.53         73.57         27.78         78.83         47.30         47.20         39.04           77.34         25.52         60.81         84.83         77.33         59.31         17.77         78.83         47.30         54.05         47.20           22.52         60.81         84.83         39.79         23.27         28.53         18.77         83.09         14.26         25.53           117.24         66.81         84.83         39.79         23.27         28.55         18.77         83.09         14.26         25.52           117.24         66.81         66.81         48.80         26.28         120.12         18.02         20.27         41.29         57.06           26.28         53.00         21.02         24.74         47.30         84.59         68.92         20.27         41.29         57.62           26.	38	90.09	27.03	43.54	51.05	81.08	75.07	39.79	27.03	17.27	90.84	36.79	123.12
60.81         31.53         18.77         34.80         14/14         195.19         42.703         52.55         53.30         31.53         42.79           77.33         25.53         13.53         14.73         26.26         48.80         14.70         31.53         42.79           50.30         42.79         30.78         47.30         30.78         47.30         30.40           22.52         34.53         30.78         77.33         59.31         77.37         78.83         47.30         54.05         41.29           22.52         34.53         30.99         28.53         27.73         27.78         78.83         47.30         54.05         41.29           22.52         34.53         59.79         28.53         27.77         78.83         47.30         41.26         25.53           46.55         51.80         33.03         26.28         120.17         18.27         71.31         46.85         27.56           26.55         60.81         60.81         26.83         17.31         42.49         47.66         57.00         47.70         47.84         48.85         57.00         49.56         57.00         49.56         57.00         49.56         5	93	138.89	111.86	45.79	19.52	37.54	58.56	15.01	83.33	31.53	71.32	34.53	74.32
f / 33         25.53         73.57         76.28         60.06         26.28         60.06         76.28         60.06         76.28         45.06         41.20 <t< td=""><td>40</td><td>60.81</td><td>31.53</td><td>18.77</td><td>54.80</td><td>147.14</td><td>195.19</td><td>27.03</td><td>52.55</td><td>53.30</td><td>31.53</td><td>42.79</td><td>39.04</td></t<>	40	60.81	31.53	18.77	54.80	147.14	195.19	27.03	52.55	53.30	31.53	42.79	39.04
30.30         42.71         30.30         47.30         34.00         41.29           30.31         42.52         30.01         10.00         76.00         76.33         65.31         12.17         76.85         47.30         34.05         47.29         25.53           33.02         28.53         77.33         28.53         77.33         86.33         14.86         25.53         87.57         88.33         14.86         25.53         87.57         88.33         14.26         25.53         87.57         87.57         88.33         14.86         25.53         87.57         87.57         88.33         14.26         25.52         87.57         87.57         41.29         87.57         87.57         87.57         41.29         87.52         27.52 </td <td>41</td> <td>77.33</td> <td>25.53</td> <td>/3.5/</td> <td>26.28</td> <td>90.09</td> <td>26.28</td> <td>48.80</td> <td>85.58</td> <td>30.78</td> <td>47.30</td> <td>39.04</td> <td>108.86</td>	41	77.33	25.53	/3.5/	26.28	90.09	26.28	48.80	85.58	30.78	47.30	39.04	108.86
10.32   04.31   83.09   20.35   77.35   28.53   55.55   18.77   93.09   14.26   67.57     22.52   60.81   84.83   39.79   23.27   20.27   19.52   18.05   123.12   46.56   22.52     177.12   60.81   63.81   48.80   26.28   120.12   18.02   30.03   14.26   67.57     46.55   60.81   63.81   28.53   21.02   24.77   57.81   43.54   126.87   56.31   48.05   49.55     29.28   63.81   30.03   33.03   36.79   45.79   69.07   28.53   93.09   38.29   26.28     42.63   44.09   47.70   38.86   54.41   54.31   43.50   46.79   56.29   43.74   42.89     44.09   44.09   49.19   49.19   46.79   46.79   56.29   43.74   42.89	44.	20.30	942.78	30.70	00.00	77.93	10.01	47.77	70.03	05.74	24.03	41.29	39.04
22.72         50.01         0.4 co. 3         2.3.7         2.3.5         2.3.2         2.3.5         2.3.2         2.3.5         2.3.5         2.3.2         2.3.5         2.3.2	54	20.07	50.40	93.09	20.03	20.00	28.5	17.11	(0.03	80.33	1.4.85	25.53	49.55
177.72         60.81         63.81         48.80         28.28         120.12         18.02         30.03         20.27         41.29         57.06           46.55         64.56         50.30         27.02         42.04         47.30         94.59         66.82         26.27         41.29         57.06           2.65         64.56         50.30         21.02         24.74         47.30         94.59         66.82         26.28         28.53         29.28           2.65         66.87         26.31         48.05         48.56         48.56         48.56         48.56         48.56         48.56         48.56         48.56         48.56         48.56         48.56         48.56         48.56         48.56         48.56         48.56         48.56         48.56         48.76	A5	22.72	51.80	33.03	39.79	24.53	20.02	10.53	54.05	122.13	14.20 46.66	07.57	23.20
46.55         64.56         60.30         21.02         42.04         47.30         94.59         66.82         26.28         28.53         29.28           26.28         28.53         33.78         21.02         24.77         57.81         43.54         126.87         56.28         28.53         29.28           29.28         63.81         33.78         21.02         24.77         57.81         43.54         126.87         56.31         48.05         49.55           31.53         40.54         47.00         29.28         75.07         46.79         38.89         38.29         28.28           42.63         44.09         47.00         38.86         54.31         54.31         40.57         56.29         43.74         46.80	46	117.12	60.81	63.81	48.80	26.28	120.47	18.02	30.03	20.02	40.33	57.08	37.54
26.28         28.53         33.78         21.02         24.77         57.81         43.54         126.37         56.31         48.05         49.19           29.28         63.81         30.03         33.03         36.79         45.79         69.07         28.53         93.09         38.29         26.28           31.53         40.54         57.06         29.28         75.07         78.83         67.57         27.03         51.05         104.35         55.55           42.63         47.09         47.00         38.86         54.31         54.31         43.50         46.79         56.29         43.74         46.89	1 P	46.55	64.56	50.30	21.00	42.04	47.30	04 50	90.03	26.28	98 53	00.70	90.08
29.28         63.81         30.03         33.03         36.79         45.79         69.07         28.53         93.09         38.29         26.28           31.53         40.54         57.06         29.28         75.07         78.83         67.57         27.03         51.05         104.35         55.55           42.63         42.63         47.70         38.86         54.31         54.31         43.50         40.57         56.29         43.74         42.49           44.09         46.19         46.19         46.79         46.79         46.79         46.79	48	26.28	28.53	33.78	21.02	24 77	57.81	43.54	126.87	56.31	48.05	40.55	50.00
3153     40.64     57.06     29.28     75.07     78.83     67.57     27.03     51.05     104.35     55.55       42.63     41.94     47.70     38.86     54.41     54.31     43.50     40.57     56.29     43.74     42.49       1     44.09     49.19     49.19     46.80	49	29.28	63.81	30.03	33.03	36.79	45.79	69.07	28.53	93.09	38.29	26.28	50.30
42,63	50	31.53	40.54	57.06	29.28	75.07	78.83	67.57	27.03	51.05	104.35	55.55	39.79
44.09 49.19 46.79	an/slide	42,63	41.94	47.70	38,86	54.41	54,31	43.50	40.57	56.29	43.74	42.49	54.16
	n/animal		00 77										

Animal N°	(1×) (25) (25) (27) (27) (27) (27) (27) (27) (27) (27	6534			6532			6531	
Slide No. BC-07-	217 A	217 B	217 C	218 A	218 B	218 C	219 A	219 B	219 C
ode BC-07-13	A1	A2	A3	F1	F2	F3	N	N2	EN
File No. BC-07-13	A1.xls	A2.xls	A3.xts	F1.xls	F2.xls	F3.xls	N1.xls	N2.xls	N3.xls
No. of cell		lail length			I all length			I ail length	
-	126.12	124.62	102.10	124.62	146.39	57.06	28.53	99.10	41.29
7	123.87	33.78	140.39	133.13	30.79	188.44	39.31	99.60	39.04
2	174.17	200.45 66.82	110 36	30.78	123.12	116.36	36.79	60.06	03.70
r u:	150.90	117.87	138 14	90.84	109.61	50.30	43.54	81.83	108.86
9	107.36	102.85	99.10	81.83	18.77	53.30	42.04	78.83	14.26
7	104.35	73.57	140.39	91.59	77.33	70.57	55,55	68.32	36.04
8	24.02	28.83	159.91	169.67	111,86	48.05	56.31	59.31	50.30
6	79.58	160.66	100.60	74.32	70.57	56.31	44.29	46.55	63.06
2;	57.06	103.60	191.44	72.07	108.86	131.38	51.05	61.56	27.03
= 5	199.37	207.20	45.70	120.12	70.58	130.63	57.08	38.70	10.01
126	131.38	98.35	148 65	66.06	30.03	156.90	50.30	27.78	42.70
4	98.35	66.82	159.16	108.86	117.87	100.60	78.83	21.02	38 29
15	29.28	150.15	55.55	57.06	72.82	171.17	26.28	29.28	31.53
16	86.33	196.69	177.92	109.61	168.17	178.68	69.82	26.28	62.31
17	75.82	139.64	207.95	27.78	41.29	180.18	84.08	46.55	38.29
18	150.90	129.88	159.16	64.56	123.87	134.38	58.56	63.81	18.77
19	96.09	150.15	60.81	139.64	54.80	54.05	112.61	49.55	28.53
20	148.65	147.14	184.68	90.08	74.32	138.89	105.10	30.03	29.28
17	140.39	144.96	80.33	126.04	19.52	469.03	16.02	38.29	75.00
23	12.76	141 14	124.62	27.03	184 68	195 94	18.77	17.27	40.54
24	46.55	105.10	109.61	97.60	126.87	173.42	37.54	25.53	26.28
25	158.41	74.32	81.08	134.38	66.82	65.31	83.33	30.03	30.78
56	95.34	161.41	109.61	29.28	135.13	35.28	44.29	54.05	68.32
27	72.82	24.02	112.61	27.03	44.29	106.60	46.55	18.77	51.80
28	179.43	99.10	27.78	132.13	149.40	30.78	31.53	5/.81	25.53
67	112.61	150.90	189.94	41.29	132.13	126.12	71 77	27.03	41.29
35	138.14	134.38	102.70	28.53	116.62	70.41	442.64	81.83	80.08
30	133.63	140 40	160.66	43.54	75.07	125 13	100.61	25.04	38.00
33	132.13	92.34	174.92	65.31	39.04	33.03	90.99	72.82	60 06
8	150.90	117.87	151.65	14.26	46.55	39.04	19.52	22.52	94.59
35	77.33	126.87	30.78	129.88	98.35	140.39	51.80	44.29	28.53
36	108.86	99.10	34,53	58.56	72.07	150,90	22.52	56.31	113.3
37	84.08	19.52	129.88	39.79	17.27	189.19	79.58	38.29	92.34
88	37.54	62.31	69.82	87.09	58.56	25.53	100.60	108.86	94.59
. Se	97.60	102.10	108.11	93.09	60.81	165.16	60.00	26.28	27.97
2 5	156.15	02.20	143.30	107.38	123.87	140.30	51.05	40.54	05.37
42	63.06	24.77	136.63	76.58	120.12	91.59	26.28	69.82	52.55
£3	90.99	87.84	111.11	83.33	42.04	123.12	64.56	33.03	105.8
4	141.14	87.09	116.36	138.89	87.09	95.34	38.29	46.55	114.1
45	112.61	115.61	132.88	109.61	149.40	123.87	72.82	75.07	20.27
40	121.62	116.36	89.34	134.63	145.61	123.12	90,00	20.27	15.01
48	69.82	129 13	158 41	39.04	148.65	117.87	132 88	57.06	89.34
49	105.10	133.63	70.57	159.91	90.84	32.28	36.79	21.77	90.84
50	148.65	58,56	65.31	66.06	102.85	66.82	74.32	24.77	124.62
Mean/slide	140 04	40000	94 5 50	V9 60	07 00	44 V V	60.03	20 01	14
Meanwall	10.01	100.30	113.30	03.00	30.40	111.2/	28.08	49.05	27.70

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Column	No Icm											0212	
Color		ŀ	0512	213 6	V V V V		J 116	k	9316	215 0	74E A	946 0	216
Color	e No. BC-U/-	213 A	213 B	213C		245	7 4 7	1	9 617	7 P	_	700	7 60 7
Column   C	e BC-U/-13	5	77.50	25		250	35		72.67	25		75.55	9
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	1-/0-XI 000	CH.XIS		CO.VIS	1		COVID	ı	% DNA in tail	EN.O.	L	% DNA in tail	OO:VIS
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	133	1		0.62	ı		0.05	ı	60.07	23.40	ı	4 55	17.17
22.19         11.50         10.91         25.06         25.07         11.50         6.91         10.97         9.57         10.97         9.57         10.97         9.57         10.97         9.57         10.97         9.57         10.97         10.97         9.57         10.97<	-6		3.70	43.68	15.55	15.33	33.21	16.49	7.64	3.13	59.50	66.34	103
22.9         0.07         3.16         0.08         44.78         38.78         44.71         13.46         4.07         0.68           2.51.9         0.04         1.02         3.05         0.04			11.81	2.08	26.16	10.19	2.90	15.05	6.91	0.97	9.57	2.05	0.33
20.44   22.5   22.5   22.5   25.8	4		0.11	10.27	3.15	0.68	14.78	38.78	44.71	13.46	4.67	66,59	62.62
1,0,4         1,1,2         99.58         7,44         29.13         0.42         68.91         9.20         4.26         6.57         4.66         6.57         4.66         6.57         4.66         6.57         4.66         6.57         4.66         6.57         4.66         6.57         4.66         6.57         4.66         6.57         4.66         6.57         4.66         6.57         4.66         6.57         4.66         6.57         4.67         6.58         7.72         7.72         7.73         7.72	2	2.61	28,29	19.79	1.66	19.80	9.37	3.85	87.46	6.51	6.32	5.58	4.62
13.66   2.06   4.25   4.34   5.92   4.75   4.75   4.75   4.75   4.85   4.75   4.85   4.75   4.85   4.75   4.85   4.75   4.85   4.75   4.85   4.75   4.85	9	20.44	14.29	69.58	7.54	29.13	0.42	89.15	98.58	22.17	8.66	5.87	17.61
4,05         2,09         4,25         1,54         2,71         4,25         7,00         3.0         2,32         7,00           1,405         6,18         6,18         6,18         1,54         4,75         4,25         1,00         2,32         7,00           1,507         1,500         2,447         1,114         1,12         7,11         7,248         1,11         4,00         1,11         4,11         4,11         1,11         4,11         7,11         4,11         4,11         4,11         1,11         4,11         7,11         4,11		13.85	7.12	1.34	29.28	19.18	2.84	63.80	63.04	13.63	4.72	6.23	3.37
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	8	4.05	2.08	42.35	10.21	15.52	4.76	45.13	69.62	4.88	2.32	70.03	32.61
1.57         1.2.40         2.4.47         11.74         11.44         1.42         2.59         15.36         16.96         16.36         16.36         16.96         16.36         16.36         16.96         16.36         16.36         16.96         16.36         16.36         16.36         16.37         16.38         16.37         16.38         16.37         16.38         16.38         16.37         16.38         16.38         16.37         16.38	6	15.48	6.18	5.70	12.38	1.34	27.12	7.91	42.58	23,48	26.37	1.79	1.19
137   1249   2442   11117   515.2   6.87   6.59   6.55   6.80   6.55   6.80   6.55   6.80   6.55   6.80   6.55   6.80   6.55   6.80   6.55   6.80   6.55   6.80   6.55   6.80   6.55   6.80   6.55   6.80   6.55   6.80   6.55   6.80   6.55   6.80   6.55   6.80   6.55   6.80	10	20.37	3.00	26.17	17.84	11.04	1.42	27.88	57.89	1.61	49.67	0.48	29.65
1,52, 2,497   42,697   42,697   41,60   41,6	=	1.37	12.49	24.42	11.17	57.52	6.87	5.59	15.35	38.00	9.78	13.97	0.11
548         61,51         4,666         21,45         9,44         24,80         13,46         61,71         4,87         60,74         0,08           120.9         31,25         0.94         1.05         3,97         157         2,58         6,25         18,77         74,87         13,77           120.9         31,25         0.94         1.05         3,97         157         2,58         6,25         18,47         49,54         22,71           120.9         21,25         1.06         1.06         0.25         0.25         0.21         0.01         3,27           120.0         23,7         4.02         2,580         6.89         7.97         0.20         0.84         0.84         0.84         0.84         0.84         0.84         0.84         0.84         0.85         0.84         0.84         0.89         0.84         0.89         0.84         0.89         0.84         0.89         0.84         0.89         0.84         0.89         0.89         0.89         0.89         0.89         0.89         0.89         0.89         0.89         0.89         0.89         0.89         0.89         0.89         0.89         0.89         0.89         0.89	12	10.25	1.50	24.97	42.67	91.16	11.09	5.34	0.45	1.87	19.45	66.38	41.85
14.69   27.50   7.39   18.05   1.40   6.14   2.68   6.24   6.24   7.487   7.		5 48	51.51	45.66	21.45	9.44	24.80	73.46	61.71	4.87	60.74	0.88	0.79
17.70         21.75         0.94         1.05         3.97         1.57         2.58         6.25         18.47         4.95         2.77           6.39         2.40         6.72         1.73         6.00         6.25         6.25         6.25         6.25         6.27 <td< td=""><td>14</td><td>14.61</td><td>27.60</td><td>7.39</td><td>18 05</td><td>140</td><td>6.14</td><td>14.94</td><td>5140</td><td>2.67</td><td>74.87</td><td>182</td><td>40.16</td></td<>	14	14.61	27.60	7.39	18 05	140	6.14	14.94	5140	2.67	74.87	182	40.16
(13)         2.172         (1.30)         6.34         2.35         6.017         (1.30)         6.34         2.34         2.35         6.017         6.03         2.03         6.03         2.03         6.03	<u> 4</u>	22.00	31.25	0 04	1 05	3 97	1.57	2.58	6.25	18.47	40.54	23.74	7.79
2.40         57.22         8.77         17.81         6.00         52.50         2.40         59.72         8.77         17.81         6.00         52.50         17.22         8.77         17.81         6.00         5.20         17.72         17.72         17.72         17.73 <td>2 4</td> <td>15.30</td> <td>27.12</td> <td>130</td> <td>98.9</td> <td>3.44</td> <td>23.58</td> <td>50 17</td> <td>67.94</td> <td>3.16</td> <td>0.34</td> <td>52.89</td> <td>48 03</td>	2 4	15.30	27.12	130	98.9	3.44	23.58	50 17	67.94	3.16	0.34	52.89	48 03
(2.7)         (2.7) <th< td=""><td>12</td><td>6.39</td><td>2.40</td><td>57.22</td><td>8.72</td><td>17.87</td><td>6.00</td><td>52.50</td><td>7.38</td><td>0.81</td><td>58.50</td><td>26.27</td><td>50.72</td></th<>	12	6.39	2.40	57.22	8.72	17.87	6.00	52.50	7.38	0.81	58.50	26.27	50.72
17.70         2.37         4.02         2.58.93         6.86         7.97         0.20         68.49         20.11         31.06         3.26           6.80         1.86         1.86         1.97         0.20         68.69         7.48         6.96         1.66         1.67         4.48         6.96         1.66         1.66         1.67	- 42	26.38	0.34	8.63	21.96	11.53	3.73	62.67	24.70	51.26	2.03	777	0.30
6 69         118         6 88         1 16         0 19         2 4 85         6 8 53         7 48         44 96         1 753           6 59         1 2 1         1 2 2         1 2 2         1 2 30         2 8 2 30         2 8 2 30         1 7 10         8 2 30         1 1 2 30         1 1 2 30         1 3 30         2 3 30         1 3 30         2 3 30         2 3 30         2 3 30         2 3 30         2 3 30         2 3 30         2 3 30         2 3 30         2 3 30         2 3 30         2 3 30         2 3 30         2 3 30         2 3 30         2 3 30         3 3 3 30         3 3 3 30	0	12.70	2.37	4 02	25.93	6 86	797	0.20	89.49	20 11	31.06	3.26	28 42
(8.56         22.05         (0.00)         (8.77         7.14         (1.91         28.04         95.76         (1700         8.26         (16.77         92.70         10.19 <th< td=""><td>200</td><td>8 80</td><td>1 18</td><td>88.8</td><td>1 16</td><td>0.64</td><td>0.18</td><td>24.85</td><td>68 63</td><td>7.48</td><td>44 96</td><td>17.63</td><td>11 75</td></th<>	200	8 80	1 18	88.8	1 16	0.64	0.18	24.85	68 63	7.48	44 96	17.63	11 75
6.39         1.41         1.244         3.71         0.60         0.60         6.90         6.04         6.04         6.09         6.04         6.04         6.09         6.04         6.04         6.09         6.04         6.04         6.09         6.01         6.00         6.01 <t< td=""><td>21</td><td>18.85</td><td>22.05</td><td>000</td><td>16.72</td><td>7 14</td><td>191</td><td>28 04</td><td>35.76</td><td>17.09</td><td>8 26</td><td>16.75</td><td>2</td></t<>	21	18.85	22.05	000	16.72	7 14	191	28 04	35.76	17.09	8 26	16.75	2
4326         0.00         14.97         4.99         2.30         2.98         57.57         92.78         16.17         54.17         4.99         1.20         2.98         57.57         92.78         16.17         54.17         4.99         1.20         2.20         2.98         9.75         9.78         16.17         52.17         4.99         1.20         9.18         9.20         9.18         9.20         9.18         9.20         9.18         9.20         9.18         9.20	22	98.30	141	12.44	3.71	0.80	0.03	89.06	50.43	50.91	13.67	10.19	71.43
5.90         16.83         2.491         13.03         18.79         17.1         14.30         9.15         5.60 I         52.01         55.20 I         51.32         52.01         55.20 I         51.32         51.32         52.01         51.32         52.01         51.32         52.01         52.01         51.32         52.01         51.32         52.01         51.32         52.01         51.32         52.01         52.01         52.01         52.02         52.02         77.2         54.0         52.0 <td>23</td> <td>43.26</td> <td>00.0</td> <td>14.97</td> <td>4.99</td> <td>2.30</td> <td>29 86</td> <td>57.57</td> <td>92.78</td> <td>16.17</td> <td>54.17</td> <td>49.91</td> <td>10.88</td>	23	43.26	00.0	14.97	4.99	2.30	29 86	57.57	92.78	16.17	54.17	49.91	10.88
26.22         17.56         20.96         27.57         11.06         22.56         34.76         29.24         28.65         9.24           34.65         11.67         20.04         27.52         14.99         11.07         52.62         34.76         29.24         28.65         26.20         3.47         16.76         20.97         28.20         3.47         16.76         3.49         16.76         3.49         16.76         3.49         16.76         3.49         16.76         3.49         16.76         3.49         3.47         16.76         3.49         3.40         16.76         3.49         16.76         3.49         3.49         3.49         3.49         3.49         3.40         3.49         3.49         3.40         3.49         3.49         3.40         3.49         3.40         3.49         3.49         3.49         3.49         3.49         3.49         3.49         3.49         3.49         3.49         3.49         3.49         3.49         3.48         3.49         3.49         3.49         3.49         3.49         3.49         3.49         3.49         3.49         3.49         3.49         3.49         3.49         3.49         3.49         3.49         3.49	24	2.90	16.83	24.91	13,03	18.79	1.71	14.30	9.15	56.01	52.01	51.32	19.67
93.46         11.67         20.04         27.52         14.99         11.97         31.66         42.35         7.82         0.97         28.20           9.36         1.65         20.04         12.72         14.29         11.29         37.28         54.3         3.49         14.78           9.36         1.65         1.64         18.65         4.76         1.64         3.72         6.43         3.49         1.78           1.07         1.65         1.21         8.83         3.27         1.62         4.28         5.65         2.53         3.47         1.67         1.67         1.67         1.67         1.67         1.67         1.67         1.67         1.68         4.52         3.47         4.58         8.88         4.53         3.34         1.478         1.67         1.66         4.65         4.53         4.53         1.59         1.59         1.50         3.27         1.65         4.53         3.34         4.73         4.53         1.59         1.58         3.57         4.65         4.54         4.53         1.73         1.58         1.73         1.58         1.73         1.58         1.73         1.58         1.73         1.58         1.73         1.78	25	26.22	17.56	30.95	18.88	5.51	11.06	82,59	34.76	29.24	28.65	9.24	11.86
14.53         18.56         39.00         13.85         0.84         11.29         52.62         37.28         5.43         33.49         14.78           31.02         19.34         19.65         12.12         8.83         32.7         5.48         5.55         2.53         0.13           31.02         19.34         24.55         2.04         0.72         8.83         3.27         6.66         2.59         6.66         2.59         6.66         2.59         6.66         2.59         6.66         2.59         6.66         2.59         6.66         2.59         6.66         2.59         6.66         2.59         6.66         3.20         4.68         4.28         5.05         2.59         6.66         3.60         3.64         3.75         4.89         4.89         4.04         1.89         9.90         0.26         2.66         2.59         0.64         3.15         2.59         0.64         3.75         4.89         4.04	26	93.46	11.67	20.04	27.52	14.99	11.97	31.66	42.35	7.82	26.0	28.20	25.49
9.96         3.62         15.46         19.65         12.12         8.82         38.18         7.07         5.48         33.72         0.03           1.27         8.65         4.75         4.23         1.21         8.83         3.27         6.60         2.53         9.02         1.53         2.59         9.02         2.53         9.92         1.50         1.50         3.20         4.65         4.54         3.33         7.241         2.96         2.53         9.40         2.81         3.27         4.56         2.39         9.92         1.50         1.50         9.40         1.52         2.64         3.30         7.241         4.95         9.50         1.50         2.39         9.92         1.50	27	14.53	18.56	39.00	13.85	0.84	11.29	52.62	37.28	5.43	3.49	14.78	14.41
31.02         16.34         24.56         2.04         0.72         88.3         3.27         16.26         4.28         5.05         2.53           0.04         31.62         4.4.56         4.28         3.04         2.81         33.58         88.84         33.03         7.291         29.66           0.04         31.43         11.76         0.57         1.00         3.20         46.54         46.43         1.33         2.39         9.96           1.58         0.32         2.86         6.16         9.40         0.25         26.42         21.51         4.30         1.74         4.80           1.65         1.51         9.46         31.93         5.29         0.56         65.03         9.45         0.04         0.81         2.864         31.59         2.599         4.04         17.86         0.86         2.864         31.59         2.599         4.04         17.86         0.86         0.86         2.869         4.04         17.86         0.86         0.86         0.86         0.86         0.86         0.86         0.89         4.04         17.86         0.86         0.86         0.86         0.89         4.04         17.87         0.89         0.86         0	28	96.6	3.62	15.46	19.65	12.12	8.22	38.18	7.07	5.48	33.72	0.03	48.97
1.21         8.65         4.76         4.228         3.04         2.81         3.58         88.84         3.03         72.91         2.966           1.64         0.32         2.32         1.70         3.26         46.54         45.43         1.39         9.92           1.58         0.32         2.89         6.16         9.40         0.25         2.86.4         45.43         1.39         9.92           1.65         1.51         0.46         31.93         5.29         0.50         0.81         2.39         9.92           0.50         15.11         10.96         14.35         7.16         14.99         8.96         10.19         5.91         4.04         17.85           0.50         15.11         10.96         14.35         7.16         14.99         8.96         10.19         4.07         17.85           0.20         15.11         10.96         14.39         8.96         10.19         5.91         4.07         4.07         17.85         4.62.8         4.85         20.94         4.04         17.85         18.89         4.04         17.85         18.89         4.04         17.85         18.88         4.02         17.34         43.12         1	29	31.02	19.34	24.55	2.04	0.72	8.83	3.27	16.26	4.28	5.05	2,53	0.30
0.64         31.43         1176         0.57         1.00         3.20         46.54         45.43         1.33         2.39         9.92           15.96         30.89         73.81         6.16         9.40         0.26         26.42         21.51         45.00         6.17         4.00           50.66         30.89         73.81         2.31         41.42         0.39         65.03         9.35         0.04         0.81         28.00           1.65         1.51         9.46         31.93         5.29         0.39         6.04         0.81         2.89         0.04         0.81         28.00           0.50         0.16         2.165         18.78         4.39         23.30         33.96         1.63         25.39         4.04         4.87         26.88         6.04         0.81         26.36         4.85         26.39         4.04         4.04         48.59         26.88         4.04         4.04         4.04         4.03         4.04         4.04         4.04         4.04         4.04         4.04         4.04         4.04         4.04         4.04         4.04         4.04         4.04         4.04         4.04         4.04         4.04         4.04 </td <td>30</td> <td>1.21</td> <td>8.65</td> <td>4.76</td> <td>43.28</td> <td>3.04</td> <td>2.81</td> <td>33.58</td> <td>88.84</td> <td>33.03</td> <td>72.91</td> <td>29.66</td> <td>2.07</td>	30	1.21	8.65	4.76	43.28	3.04	2.81	33.58	88.84	33.03	72.91	29.66	2.07
15.98         0.32         2.89         6.16         9.40         0.25         26.42         21.51         45.50         51.74         4.80           15.65         30.89         7.381         2.31         41.42         0.36         26.03         9.35         0.04         0.04         17.81         28.02           1.16         9.46         31.59         5.29         10.19         25.99         4.04         17.82         28.04         10.19         25.99         4.07         17.82         18.05         28.04         4.07         17.82         4.07         17.82         4.07         17.82         4.07         17.82         28.04         4.05         28.04         4.07         17.83         4.07         17.74         4.07         15.35         45.23         4.08         17.74         4.07         17.73         17.80	31	0.64	31.43	11.76	0.57	1.00	3.20	46.54	45.43	1.33	2.39	8 92	56.01
50.65         30.89         73.81         2.31         414.2         0.39         65.03         93.5         0.04         0.81         28.02           11.65         1.51         9.46         31.93         5.29         0.56         28.64         31.59         25.91         4.04         17.85           0.50         1.51         9.46         31.93         7.18         14.99         8.96         10.19         5.91         4.04         17.85           4.00         0.15         2.165         18.78         7.14         23.30         3.36         7.636         22.59         20.59         4.02         6.58           4.00         3.15         2.165         18.78         6.14         25.30         20.59         4.05         5.88           1.30         3.15         2.165         18.00         4.14         4.15         3.26         4.65         6.53         0.24         4.73         1.25         4.52         4.52         4.52         4.52         4.52         4.52         4.52         4.52         4.52         4.52         4.52         4.52         4.52         4.52         6.58         6.58         0.54         4.52         6.58         0.59         0.74 <td>32</td> <td>15.98</td> <td>0.32</td> <td>2.89</td> <td>6.16</td> <td>9.40</td> <td>0.25</td> <td>26.42</td> <td>21.51</td> <td>43.50</td> <td>51.74</td> <td>4.80</td> <td>1.05</td>	32	15.98	0.32	2.89	6.16	9.40	0.25	26.42	21.51	43.50	51.74	4.80	1.05
1165         1.51         9.46         3193         5.29         0.56         28.64         31.59         25.99         4.04         17.85           0.50         0.15.11         10.98         14.35         7.18         14.99         8.96         10.19         5.91         49.79         48.39           0.20         0.20         15.11         10.98         14.35         13.49         0.55         65.36         4.85         20.59         20.59         45.79         48.39           1.30         1.81         1.372         13.15         38.21         77.74         66.74         47.41         15.37         0.24           1.30         4.53         1.750         26.06         1.60         0.92         81.48         35.28         0.09         0.79         0.04           62.62         4.13         2.53         0.00         1.89         2.05         81.89         0.79         0.79         0.04           62.62         4.13         2.28         1.72         1.60         0.92         81.48         0.79         0.79         0.04         0.04         0.05         86.78         0.79         0.79         0.04         0.04         0.05         86.29	33	50.65	30.89	73.81	2.31	41.42	0.39	65.03	9.35	0.04	0.81	28.02	1.12
0.50         15.11         10.98         14.35         7.18         14.89         8.96         10.19         5.91         49.79         48.39           0.20         0.10         10.43         14.03         6.14         23.30         33.96         76.36         22.39         20.39         55.88           4.40         10.43         14.03         6.14         23.30         6.14         22.39         20.39         20.39         56.88           4.40         13.6         23.6         6.26         6.28         4.86         7.74         4.791         73.73         0.24           4.00         23.6         1.80         0.00         49.13         25.30         20.99         0.79         0.64           62.62         4.142         4.20         0.74         0.98         0.79         0.79         0.64           62.62         4.142         4.20         1.80         0.90         1.76         0.99         0.79         0.79           62.62         4.142         4.20         1.80         0.90         1.27         2.69         2.63         0.99         0.79         2.79         2.71         0.79         0.89         2.71         0.79         0.89	34	11.65	1.51	9.46	31.93	5.29	0.56	28.64	31.59	25.99	4.04	17.85	6.26
0.20         0.16         2.166         18.78         4.394         2.330         33.96         76.36         22.59         20.59         55.88           4.40         0.16         2.16         0.53         6.14         0.55         6.536         4.85         2.26         15.35         45.23           13.06         3.16         2.2.81         13.72         13.15         38.21         77.74         66.74         47.91         73.73         0.24           4.03         4.52         4.28         6.28         1.80         0.99         0.79         0.74         47.31         58.66           4.01         4.02         4.28         1.80         1.80         2.05         49.80         0.79         0.79         0.64           62.62         4.14         2.28         1.80         1.27         2.05         49.80         1.75         5.10         0.04         1.06         0.02         1.06         0.06	32	0,50	15.11	10.98	14.35	7.18	14.99	96.8	10.19	5.91	49.79	48.39	7.68
440         1943         1403         033         614         0.55         65.36         4.85         26.28         15.35         45.23           13.05         3.85         4.28         13.72         13.72         13.72         13.73         0.24           13.05         3.85         4.28         4.28         13.72         10.00         49.13         25.30         20.46         4.74         43.12         58.66           40.03         4.53         17.50         26.06         1.60         0.92         26.28         0.79         0.79         0.64           62.62         41.42         42.70         1.20         1.80         12.75         55.41         91.72         51.02         2.64           1.04         1.62         4.67         7.31         48.09         13.73         0.92         22.10         3.52           2.59         2.64         1.984         2.643         0.06         85.29         7.637         4.65         6.28         9.02           2.59         1.04         9.15         2.127         2.69         9.38         34.70         0.98         34.37         48.88         42.64           1.07         1.349         3.67 <td>36</td> <td>0.20</td> <td>0.15</td> <td>21.65</td> <td>18.78</td> <td>43.94</td> <td>23.30</td> <td>33.96</td> <td>76.36</td> <td>22.59</td> <td>20.59</td> <td>55.88</td> <td>18.74</td>	36	0.20	0.15	21.65	18.78	43.94	23.30	33.96	76.36	22.59	20.59	55.88	18.74
13.05   3.15   2.2.81   13.72   13.15   38.2.1   77.74   66.74   47.91   73.73   0.24     1.53   4.53   4.28   8.32   0.00   49.13   25.30   20.46   4.74   43.12   58.66     4.00   2.2.9   4.42   4.2.0   26.06   1.60   0.92   6.24   6.22   8.1.2   2.64     4.01   2.84   19.84   26.22   44.65   4.67   7.31   48.09   78.39   24.72   51.02   2.64     2.59   2.644   19.84   26.43   4.67   7.31   46.09   13.73   0.92   22.10   3.52     2.59   2.64   9.15   21.27   2.69   9.38   34.70   0.98   34.37   48.88   42.64     4.17   2.29   31.82   0.10   2.64   9.65   5.01   16.52   5.01   40.68     4.14   2.29   31.82   0.10   2.64   9.38   34.70   0.98   34.37     4.15   2.29   31.82   0.10   2.64   5.01   16.52   25.21   40.35   1.77   41.2     4.15   2.29   31.82   0.10   2.24   20.13   20.13   20.13   20.13   20.14     4.15   2.29   31.82   31.82   31.82   31.82   31.82   32.82     4.15   3.25   31.82   31.82   31.82   31.82   32.82   32.82     4.16   4.18   4.16   4.18   3.25   31.82   32.82   32.82     4.18   4.18   3.20   3.18   3.41   3.20   3.41     4.18   3.20   3.20   3.20   3.20   3.20     4.18   4.18   4.18   4.18   3.20   3.20     4.18   4.18   3.20   3.20   3.20     4.18   4.18   3.20   3.20   3.20     4.18   4.18   3.20   3.20   3.20     4.18   4.18   3.20   3.20   3.20     4.18   4.18   3.20   3.20   3.20     4.18   4.18   3.20   3.20   3.20     4.18   4.18   3.20   3.20   3.20     4.18   4.18   3.20   3.20   3.20     4.18   4.18   3.20   3.20   3.20     4.18   4.18   3.20   3.20     4.18   4.18   3.20   3.20     4.18   4.18   3.20   3.20     4.18   4.18   3.20   3.20     4.18   4.18   3.20   3.20     4.18   4.18   3.20   3.20     4.18   4.18   3.20   3.20     4.18   4.18   3.20   3.20     4.18   4.18   3.20   3.20     4.18   4.18   3.20   3.20     4.18   4.18   3.20   3.20     4.18   4.18   3.20   3.20     4.18   4.18   3.20   3.20     4.18   4.18   3.20     4.18   4.18   3.20     4.18   4.18   3.20     4.18   4.18   3.20     4.18   4.18   3.20     4.18   4.18   3.20     4.18   4.18   3.20     4.18   4.	37	4.40	19.43	14.03	0.33	6.14	0.55	65.36	4.85	26.28	15.35	45.23	40.33
1.53         1.82         4.28         8.32         0.00         49.13         25.30         20.46         4.74         45.12         58.66           4.03         4.03         4.53         2.60         1.60         0.92         81.48         35.48         0.79         0.79         0.64           62.62         4.13         4.20         7.24         1.89         2.05         49.60         78.99         2.472         51.02         2.64           1.047         0.36         35.01         9.78         0.90         12.75         8.541         91.15         6.22         28.10         2.64           0.02         2.83         3.601         0.90         12.75         8.541         91.15         6.22         28.10         3.62           2.59         2.644         1.84         0.06         0.60         65.29         76.91         4.068         1.34         4.06         9.02           7.77         1.04         2.127         2.69         2.32         18.49         69.23         2.62         71.46         0.06         0.39           1.77         2.05         3.18         2.01         1.80         11.18         7.12.59         59.33         2.62 </td <td>38</td> <td>13.05</td> <td>3.15</td> <td>22.81</td> <td>13.72</td> <td>13.15</td> <td>38.21</td> <td>77.74</td> <td>66.74</td> <td>47.91</td> <td>73.73</td> <td>0.24</td> <td>26.43</td>	38	13.05	3.15	22.81	13.72	13.15	38.21	77.74	66.74	47.91	73.73	0.24	26.43
40.03         4.53         17.50         26.06         1.60         0.92         81.48         35.28         0.99         0.79         0.64           62.62         42.70         7.24         1.89         2.05         49.80         78.99         2.72         51.02         2.64           10.47         0.36         35.01         9.78         0.90         12.75         55.41         91.89         2.72         4.06         4.06         4.06         4.09         13.73         0.92         22.10         3.52         4.06         3.52         4.06         3.52         8.12         4.06         3.52         4.06         3.52         8.12         4.06         3.52         4.06         3.52         2.24         3.52         4.06         3.52         3.27         4.06         3.52         3.27         4.06         3.52         3.27         4.06         3.52         3.27         4.08         4.26         3.27         4.06         3.27         4.06         3.27         4.06         3.27         4.06         3.27         4.06         3.27         4.06         3.27         4.06         3.27         4.06         3.27         4.06         3.27         4.06         3.27         4.06	39	1.53	1.82	4.28	8.32	00.00	49.13	25.30	20.46	4.74	43.12	58.66	22.28
62.62         41.42         42.70         7.24         1.89         2.05         49.80         78.99         24.72         51.02         26.4           10.47         0.02         25.01         9.78         0.09         12.75         55.41         91.75         6.102         26.4         1.05         8.12         4.06           0.07         2.89         26.22         44.67         7.31         46.09         13.75         6.29         22.10         3.52           2.59         2.64         19.84         6.06         0.60         85.29         76.31         1.45         52.85         9.02           2.99         0.00         13.49         9.67         6.96         9.38         34.70         0.98         34.37         48.88         42.64           1.173         2.00         13.49         9.67         6.96         2.32         18.49         69.23         2.91         44.65         6.85           1.173         2.29         31.82         0.10         2.64.3         5.01         15.59         5.51         40.38         1.77         4.12           6.49         1.27         2.69         9.38         34.70         0.98         34.37         48	40	40.03	4.53	17.50	26.06	1.60	0.92	81.48	35.28	0.99	0.79	0.64	56.73
10.47         0.36         35.01         9.78         0.90         12.75         55.41         9.15         6.22         8.15         6.22         8.10         9.22         10.22         8.10         9.22         10.22         8.10         3.52         8.10         9.10	41	62.62	41.42	42.70	7.24	1.89	2.05	49.80	78.99	24.72	51.02	2.64	49.84
0.02         2.81         2.6.22         4.65         7.31         4.6.9         13.73         0.92         2.2.10         3.52           2.96         2.84         2.64.4         2.64.3         2.64.3         2.64.3         2.6.3         4.6.7         7.31         40.08         13.24         9.52           3.86         0.40         23.15         13.22         0.04         11.82         76.91         40.08         13.94         0.57         0.39           7.73         10.64         9.15         21.27         2.69         9.38         34.70         0.98         34.37         46.86         42.64           11.73         20.75         4.40         1.80         11.66         18.05         72.59         59.33         29.51         44.65         6.85           1.00         2.29         31.82         0.10         26.43         5.01         15.92         25.21         40.35         1.77         41.2           6.49         3.35         17.17         1.51         20.43         5.22         90.79         56.55         47.32         13.11         6.92           16.20         14.56         1.2.40         9.65         41.18         44.65         6.85	42	10.47	0.36	35.01	9.78	0.90	12.75	55.41	91.15	6.22	8.12	4.06	53.74
2.59         2.64         1984         2.643         0.06         0.60         88.29         76.37         1.45         52.85         9.02           2.59         2.36         1.322         0.06         0.60         88.29         40.63         1.34         0.57         0.39         0.57         0.39           7.73         10.64         9.15         21.27         2.69         9.38         34.70         0.98         34.37         48.88         42.64           2.991         0.00         13.49         9.67         6.96         2.32         18.49         86.23         2.85         71.46         0.46         6.85         11.46         0.46         6.85         11.46         0.46         6.85         11.46         0.46         6.85         11.77         4.15         4.15         4.65         6.85         1.77         4.15         6.92         1.73         1.73         1.77         4.15         6.92         1.77         4.15         6.92         1.77         4.15         6.92         1.77         4.15         1.77         4.15         1.77         4.15         1.77         4.15         1.77         4.15         1.77         4.15         1.73         1.73         1.74 <td>43</td> <td>0.02</td> <td>2.81</td> <td>26.22</td> <td>44.65</td> <td>4.67</td> <td>7.31</td> <td>48.09</td> <td>13.73</td> <td>0.92</td> <td>22.10</td> <td>3.52</td> <td>22.04</td>	43	0.02	2.81	26.22	44.65	4.67	7.31	48.09	13.73	0.92	22.10	3.52	22.04
7.39         0.40         2.315         13.22         0.04         11.82         7 (8.91         4 (10.84)         13.37         0.05         13.37         0.05         13.27         0.09         11.82         7 (1.93)         0.09         13.37         40.88         42.64         <	4	2.59	26.44	19.84	26.43	0.00	0.60	85.29	76.37	1.45	52.85	9.02	5.34
2.9.91         0.004         3.1.5         2.1.57         0.3.6         2.3.5         0.3.7         0.3.6         0.3.6         0.3.6         0.3.6         0.3.6         0.3.6         0.3.6         0.3.6         0.4.1         0.4.1         0.4.6         0.4.1         0.4.1         0.4.1         0.4.2         0.4.1         0.4.1         0.4.1         0.4.2         0.4.1         0.4.1         0.4.1         0.4.1         0.4.1         0.4.1         <	ψ. Υ	3.85	0.40	23.15	13.22	400	70.50	10.91	90.00	0.04	0.07	42.64	19.91
1.73         20.75         4.40         1.80         11.16         18.05         72.59         56.33         29.51         44.65         6.85           1.00         2.29         31.82         0.10         26.43         5.01         15.92         25.21         40.35         1.77         4.12           6.49         3.35         17.77         1.51         20.19         5.22         90.79         56.55         47.32         13.11         6.92           16.20         41.34         20.22         14.09         12.04         9.65         41.18         43.65         27.62         20.14           15.0         41.39         41.39         41.18         34.05         27.62         20.14	24	20.00	500	13.40	0.67	2.03 8.06	2.30	18 40	60 23	26.5	71.46	147.04 0.46	30.53
1.00         2.29         31.82         0.10         26.43         5.01         15.92         25.21         40.36         1.77         4.12           6.49         3.35         17.17         1.51         20.19         5.22         90.79         56.55         47.32         13.11         6.92           16.20         3.45         20.22         14.09         12.04         9.65         41.18         34.05         27.62         20.14           15.96         15.96         14.18         34.05         27.62         20.14	έV.	11.73	20.75	4.40	200	11.5	18.05	72.50	50.33	20.5	44.65	200	23.44
649 335 17.17 1.51 20.19 5.22 90.79 56.55 47.32 13.11 6.92 16.20 11.45 20.22 14.09 12.04 9.65 41.18 43.63 17.36 27.62 20.14 17.96 11.93 34.05 34.05 23.49	49	100	220	31.82	900	26.43	503	15.92	25.21	40.35	177	4 12	0.48
16.20 11.45 20.22 14.09 12.04 9.65 41.18 43.63 17.36 27.62 20.14 21.18 15.96 17.99 23.49	20	6.49	3.35	17.17	1.51	20.19	5.22	90.79	56.55	47.32	13.11	6.92	43.60
15.96 11.93 34.05 23.49	Mean/slide	16.20	11.45	20.22	14.09	12.04	9.65	41.18	43.63	17.36	27.62	20.14	22.72
	Mean/animal		15.96			11.93			34.05			23.49	

400 mg/kg/day (>	v (x2)			ļ	2" treatment.		79/08/5007				
	5518 220 R	2066	A 199	9517	22/10	A 666	8320 727 R	222 C	A 500	9519 723 B	223 C
1	B2	B3	¥1	2	2		D2	D3	S1	S2	S3
	32.xls	B3,xls	K1.xls	K2.xls	K3.xls	D1.xls	D2.xls	D3.xls		S2.xls	
×	% DNA in tail			% DNA in tail			% DNA in tail			% DNA in tail	
Н	0.38	4.53	2.37	45.00	8.	38.89	50.86	0.10	0.45	31.18	1.43
+	0.27	38.75	4.3 0.05	2.65	86.0	7.77	0.30	1 27	0.03	40.02	14.30
+-	0.22	12.21	36.05	10.48	1.10	404	36.40	2.76	1.17	0.43	1.15
$\vdash$	65.11	1.07	1.30	1.02	60.0	96.67	12.91	4.11	0.15	6.27	4.19
Н	44.40	1.68	1.04	0.20	4.25	8.31	4.34	30.93	3.32	34.75	2.71
+	0.81	81.20	22.48	0.08	30.48	10.17	84.99	25.87	0.04	0.17	0.78
+	94.45	47.14	0.00	11.72	800	95.92	10.46	15.42	90.0	0.66	0.97
+	2.60	25.37	14.	1.45	16.12	1.5/	59.13	1.28	70.07	8.50	0.41
+	4,7	00.00	27.1	44.	0.30	2.49	20.00	00.0	27.30	2.5	10.07
$\dagger$	27.79	90.04	0.70	25.11	0.15	3.10 70.06	41.03	10.15	0.02	12.13	45.00
+	60.39	9.04	0.50	77.65	0.00	19.90	1.04	20.0	5	2.00	3.22
t	20.03	5.33	00.00	0.77	4.55	19.05	20.92	00.0	1,30	0.00	0.70
$\dagger$	90.0	200	1 20	0.00	72.0	7.10	20.07	0.00	64.4	100	3.07
$\dagger$	10.15	2.0	00.0	0.30	0,00	82.44	5.47	00.0	0.0	25.42	0.00
$\dagger$	1 38	71.42	70.0	3 94	0.02	24.0	15.30	60.75	20.0	1 53	238
+	15.18	0.25	75.0	3.77	1 40	22.71	11.47	10.13	0.70	500	4.75
	23.80	2.5	432	00.6	00.0	30.00	58.34	48.84	200	17.21	12.15
L	0.13	100	8 70	55.76	2.65	28.46	4.35	0.13	35.80	1.27	0.06
	2.85	24.79	0.78	16.37	2,90	59.88	24.20	18.74	2.74	0.00	1.20
_	39.27	47.61	62.15	0.18	0.13	3.92	0.02	56.67	7.50	0.00	0.02
	32.59	8.56	0.25	12.82	14.50	11.60	16.82	0.82	7.89	0.22	1.07
	48.25	18.07	0.25	3.90	0.51	6.63	4.35	0.01	8.41	2.12	0.12
0	33.22	6.50	1.55	0.78	8.17	8.55	65.42	43.36	23.25	2.54	0.31
	44.45	6.95	0.67	94.70	81.84	16.37	8.77	0.34	4.59	3.18	1.50
0,	40.35	0.10	1.54	0.68	1.21	57.68	48.60	1.21	3.37	0.29	0.01
,	11.90	74.38	1.33	0.74	0.97	52.70	0.40	0.04	0.41	2.94	3.66
	6.04	67.99	6.17	0.68	67.39	87.18	11.36	1.98	3.30	0.41	2.07
-	30 04	83.40	45.0	73.87	37.74	44.03	32.41	27.70	0.23	1.84	12.17
+	30.01	25.33	3.70	0.90	7.66	41.02	28.67	16.17	12.74	20.0	0.07
-	1 60	718	9.45	1.23	20.47	8.55	62.03	11.00	0 60	180	136
	0.92	83.84	3.35	16.99	89,33	1.06	2,55	30,56	0.03	4.87	58.49
_	12.50	30.03	11.16	0.40	10.52	8.97	18.41	9.28	2.83	0.02	0.30
34.81	75.97	1.48	7.98	1.45	0.15	31.61	24.44	62.01	0.30	8.41	0.04
	72.89	1.66	40.59	9.83	3.08	41.35	27.88	38.47	0.18	0.14	9.59
†	88.74	56.49	81.55	13.75	CS: 1	3/.6/	70.82	3.15	0.50	40.0	0.23
	57.03	60.13	10.12	10.70	0.50	66.03	00.70	20.42	0.70	0.94	0.00
$\dagger$	41.53	84.28	15.37	15.96	12.74	9.63	34 12	4.05	0.70	0.71	16.36
t	93.82	71.38	0.74	22.47	4.40	44.93	0.66	0.06	3.92	1.14	0.77
$\vdash$	37.53	95.47	4.54	27.64	0.02	30.50	58.11	0.11	20.52	0.82	0.95
	30.03	3.89	4.52	4.42	0.12	1.57	10.08	13.48	0.28	3.80	3.16
	0.23	12.62	4.56	17.47	3.02	72.71	0.09	1.92	0.03	0.53	1.43
	1.22	93.71	39.36	50.09	0.09	1.09	31.59	49.08	0 03	1.47	0.00
1	47.52	15.75	2.16	6.87	6.32	69.90	11.85	61.12	9.99	1.11	0.07
+	18.72	11.96	40.09	19.59	0.01	15.09	1.36	23.02	35.38	0.81	0.86
+	57.39	70.10	82.80	17.78	8.77	81.44	45.70	0.85	0.03	1.32	0.29
37.76	36.54	*		13/64	36.37 46.53	34 00	36.48	30		***	***
1	20.00	7.1.2		14.8	2.0	91.99	20.10	2	4.05	00.0	7;,
				300			25.20			26.3	

No. BECOT-13   C.24   C.25	Test item Dose:	Catéchol 200 mg/kg/d	lay (x2)	Organ:	STOMACH	·	1 <sup>st</sup> treatment: 2 <sup>nd</sup> treatment		25/09/2007 26/09/2007				
Column	°N		6524			l			6522			6525	
Colorest    BC-0/	224 A	224 B	224 C	225 A	225 B	225 C	226 A	226 B	226 C	⋖	227 B		
Property   1134   113	-07-13	۲	72	J3	ပ	C5	ຮ		77	L3	1 1	<b>R</b> 2	1 1
Column	s. BC-07-1	J1.xls	J2.xls	J3.xls	C1.xls	C2.xls	C3.xls	- 1	L2.xls	L3.xls		R2.xls	ı
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	cell		% DNA in tail			% DNA in tail			% UNA in tail			% DNA in tail	
1.67   1.58	ļ	0.00	34.29	1.78	0.02	9.97	0.30	54.76	26.78	1.49		6.05	H
15   10   10   10   10   10   10   10	7 6	90.03	3.50	0.20	20.14	2.92	4.83	70.21	17.7	0.31		0.00	
187   1051   1421   1422   1424   1429   1537   2249   18147   0.007   18107		4163	0.35	0.29	0.16	12.62	231	32.89	0.00	168	10.33	25.00	17.62
1,14   1,14		1.67	0.51	4.21	1.82	1.29	15.37	2.49	91.47	4.00	0.01	18.10	90.09
1.00		1.87	1.14	1.62	12.44	5.27	0.31	12.22	16.77	30.79	2.28	0.37	0.18
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,		0.00	1.27	14.16	31.19	0.20	17.59	2.65	0.16	7.51	5.09	0.14	20,75
1,000		9.33	0.41	36.43	0.05	0.54	8.31	6.80	0.02	4.36	1.14	2.15	13.48
1.37   9.047   0.08		10 93	0000	96.43	5.42	40.52	2.43	2.65	10.49	4.38	0.52	230	500
1, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2, 2,		11.47	12.79	0.92	1.42	0.08	0.02	9.42	1.88	1.42	95.24	06.0	0.01
0.01         2.89         0.16         0.02         0.37         0.26         2.65         1.76         27.39         1.87         4.37         7.81         1.76         1.76         0.02         0.04         2.54         5.71         0.44         2.73         0.04         0.05         1.76         0.05         0.05         0.05         1.76         0.05 <t< td=""><td></td><td>1.33</td><td>80.47</td><td>0.68</td><td>0.10</td><td>2.07</td><td>1.07</td><td>1.57</td><td>3.85</td><td>1.13</td><td>2.81</td><td>3.42</td><td>24.56</td></t<>		1.33	80.47	0.68	0.10	2.07	1.07	1.57	3.85	1.13	2.81	3.42	24.56
151   407   0.01   1.51   0.02   0.09   0.84   5.69   21.83   0.01   3.52     24.47   1.12   26.79   0.01   1.51   0.02   0.09   0.04   23.14   0.05   0.01   3.52     24.47   1.12   26.79   0.01   0.01   0.01   0.01   0.01   0.01   0.01   0.01   0.02     0.44   0.27   0.04   0.05   0.05   0.00   0.04   0.03   0.01   0.01   0.02   0.00		0.01	2.89	0.16	0.02	0.37	0.26	2.65	1.76	27.99	19.71	4.37	41.61
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,		7.51	4.07	0.01	1.51	0.02	0.90	35.49	5.69	21.83	0.01	3.52	3 69
2.4.4.7.         1.68         0.07         4.08         0.03         3.56         3.57         0.04         0.27         3.56         0.07         0.04         0.05         3.57         0.04         0.05         3.57         0.04         0.05         0.04         0.05         0.04         0.05         0.04         0.05         0.04         0.05         0.04         0.05		16.11	18.01	1.15	80.88	0.00	0.04	23.10	94.42	1.64	0.53	8.81	22.98
0.7.4         0.18         0.18         0.18         0.18         0.18         0.19 <t< td=""><td></td><td>9.32</td><td>89.</td><td>10.01</td><td>0.88</td><td>26.03</td><td>4.67</td><td>0.37</td><td>3.16</td><td>3.77</td><td>0.00</td><td>0.27</td><td>0.55</td></t<>		9.32	89.	10.01	0.88	26.03	4.67	0.37	3.16	3.77	0.00	0.27	0.55
134   0.077   0.077   0.054   0.055   0.055   0.051   0.054   0.055		0.48	2.6	8.54	13.76	5.21	0 00	13.00	30.80	0.00	107	2.70	6.02
0.23         92.17         1.67         4.49         5.37         0.04         1.72         2.68.2         1.08         0.05           4.10         1.15         2.07         0.07         0.08         0.05         2.64.2         5.09         1.10         0.02           0.06         3.54         1.69         0.07         0.08         0.00         2.29         4.13         8.59         1.02         0.00           1.08         0.08         0.00         1.22         2.29         4.73         8.59         1.07         0.02           1.08         0.78         0.10         0.48         0.00         1.22         2.29         4.72         6.72         0.00           1.08         0.78         0.10         0.14         1.09         1.22         2.25         4.72         0.07         0.17         4.72         4.72         4.72         4.72         4.72         4.73         4.74		1.34	0.07	0.03	0.05	3.19	45.88	0.51	0.14	2.68	11.90	0.69	0.01
4.07         2.26.1         0.74         5.07         0.00         3.37         0.05         2.54.3         5.09.1         1.732         66.00           0.66         3.54         1.60         0.010         4.489         0.02         22.99         4.413         66.50         6.83         1.22           0.06         3.54         1.60         0.16         4.489         1.02         22.89         4.413         6.65         6.83         1.22           0.06         0.18         0.19         1.10         1.13         22.59         4.70         1.70         4.70         1.72         4.70           0.07         0.18         0.10         0.04         1.10         1.10         2.24         4.70         0.07         4.70         1.72         4.70           0.08         0.10         0.04         1.10         <		0.23	92.17	13.67	4.49	24.68	5.37	0.01	1.22	26.62	1.08	0.26	0.51
4,10         1,15         2,07         0,07         0,48         0,00         93,64         4,48         0,00         0,12           0,06         3,54         1,05         0,10         0,48         0,00         93,64         4,48         0,00         0,12           0,06         3,28         1,01         0,18         0,02         1,07         1,09         1,72         1,73           1,138         0,28         2,89         1,07         1,18,19         22,56         4,700         1,27         4,79           0,13         2,88         1,60         0,18         0,04         1,07         1,27         2,35         0,07         1,79         1,79           0,19         0,19         0,04         1,07         1,28         2,36         0,07         1,79 </td <td></td> <td>0.07</td> <td>29.21</td> <td>0.74</td> <td>5.07</td> <td>0.00</td> <td>3.37</td> <td>0.05</td> <td>25.43</td> <td>50.91</td> <td>17.32</td> <td>66.00</td> <td>11.63</td>		0.07	29.21	0.74	5.07	0.00	3.37	0.05	25.43	50.91	17.32	66.00	11.63
0.06         3.54         1.60         50.10         47.69         1.41         222.39         5.91         3.92         6.52         2.53         1.22           1.138         2.58         0.18         1.00         1.07         18.19         10.95         2.24.6         4.70         1.75         4.79         1.75           0.23         2.88         5.50         0.04         1.07         18.19         10.95         2.24         4.70         1.77         4.79         1.75           0.23         2.88         5.50         0.03         0.04         0.04         0.04         0.04         0.04         0.04         0.07         0.09         0.05         0.07         4.78         2.66         0.07         0.09         0.05         0.07         0.09         0.09         0.05         0.07         0.09         <		6.10	1.15	2.07	0.07	0.48	0.00	93.64	24.24	4.48	0.00	0.12	39.97
(1.38)         0.78         2.50         0.48         1,07         18.19         1,035         22.56         47.00         12.72         47.17           0.23         0.28         2.50         0.04         1,07         18.19         1,035         22.56         47.00         12.72         47.17           0.25         0.28         0.28         0.05         0.03         0.05         10.12         22.4         43.76         14.18         0.07         4.18           0.05         0.28         0.28         0.28         0.275         22.24         4.18         20.7         4.18         0.07         4.18         0.09         0.07         0.09         0.00		0.00	3.86	2.50	53.08	17.66	14.10	22.39	501	3 93	6.83	27.7	97.48
0.23         2.84         5.60         0.18         0.04         7.37         2.04.0         2.33         0.07         4.08         17.32           1.55         0.88         1.32         0.021         0.04         1.0.12         1.24         4.376         1.113         0.09         0.09           0.89         2.45         0.06         0.03         0.09         0.75         2.62.4         4.376         0.01         0.09         0.09           0.69         1.05         0.00         0.75         2.62.4         4.18         2.676         0.31         3.67         0.09         0.09         0.09         0.09         0.09         0.09         0.00         1.05         0.00         0.00         1.05         0.00         0.00         1.05         0.00         0.00         0.00         0.00         2.02         0.00         2.03         1.01         0.00         0.00         1.05         0.00		1.38	0.20	260	0.49	107	18 19	10.95	23.56	47.00	12.72	47.91	29 90
1.53         0.88         1.32         0.045         1.012         2.24         4.376         11.13         0.03         0.09           3.09         1.656         0.056         0.056         0.033         0.03         1.294         4.18         2.676         0.01         0.00           3.09         1.656         6.506         0.000         0.075         2.624         4.18         2.676         0.01         0.00           1.79         0.40         3.433         0.00         0.05         2.00         1.66         1.976         0.01         11.54           0.25         0.00         1.09         0.00         0.00         0.00         0.00         0.00         1.66         0.01         1.15         0.00         1.00         0.00         1.00         0.00		0.23	2.84	5.60	0.18	0.04	7.37	20.40	2.33	0.07	4.08	17.92	12.40
0.69         2.45         0.06         0.03         0.03         12.98         13.62         7.00         49.76         0.01         0.01         0.00           0.06         0.05         0.03         0.03         26.24         4.18         2.70         49.76         0.01         0.00         <		1.53	0.88	1.32	0.21	0.45	10.12	2.24	43.76	11.13	0.03	0.99	00.0
3.09         10.58         6.50         0.00         0.75         2.62.4         4.18         2.6.76         0.31         3.57         5.50           0.05         1.05         0.00         2.78         1.65         0.00         1.92         0.01         1.54         0.00         1.05         0.01         1.54         0.00         1.05         0.01         1.05         0.00         1.154         0.00         1.05         0.00         1.05         0.00         1.05         0.00         1.05         0.00         1.05         0.00         1.05         0.00         1.05         0.00         1.05         0.00         1.05         0.00         0.00         1.05         0.00         0.00         1.05         0.00		0.89	2.45	0.06	0.03	0.03	12.98	13.62	7.00	49.76	0.01	0.00	19.03
0.05         5.34         5.34         0.96         2.39         2.71 60         16.38         8.70         91.96         1.00         0.02           0.05         0.040         34.39         0.09         0.50         0.00         20.32         1.015         0.68         37.83         0.00           0.02         0.04         1.05         0.09         0.50         0.00         1.44         0.015         0.01         1.15.4           0.02         0.02         1.05         1.06         1.26         0.01         0.00         0.00         0.01         0.00         0.00         0.01         0.00         0.00         0.01         0.00         0.00         0.06         0.01         0.00		3.09	10.58	6.50	0.00	0.75	26.24	4.18	26.76	0.31	3.67	5.50	71.65
0.25         0.00         1.05         0.00         1.05         0.00         1.05         0.00         1.05         0.00         1.05         0.00         1.05         0.00         1.05         0.00         1.05         0.00         1.05         0.00         1.05         0.00         20.85         0.00         22.85         0.07         49.34         0.00         22.75         0.00         22.85         0.07         49.34         0.00         0.00         22.76         0.01         0.01         0.00		0.00	3.54	27.30	8000	3.73	27.88	10.38	9.70	91.90	19.76	11.52	6.43
0.02         0.21         3.96         0.07         1.44         0.00         29.85         20.77         49.34           2.72         0.26         47.16         12.56         20.93         11.33         97.43         30.54         8.42         0.11         49.34           0.02         10.16         1.86         2.093         11.33         97.43         30.54         8.42         0.11         8.06           0.02         10.16         1.61         0.18         1.216         8.75         1.216         8.26         2.14         8.00           0.03         2.70         0.49         1.73         3.49         0.05         0.06         3.96         4.04         4.35 1           0.90         0.13         1.952         0.02         23.90         0.13 79         0.06         0.05         2.06         4.04         4.35 1           2.81.9         0.22         0.02         23.90         0.13         0.06         0.05         2.06         4.04         4.35 1           2.81.9         0.02         2.23         0.06         0.01         4.249         0.61         2.246         4.20         4.04         4.35 1         3.06           2.81.9<		0.25	000	4.05	00.0	0.50	0.00	20.78	10 15	.92	37.83	t (2	7 17
272         0.26         4716         12.56         20.93         11.33         97.43         30.54         8 42         0.11         5.98           0.02         1.016         16.11         0.78         1.35         12.16         88.75         36.69         2.76         4.14         6.50           0.02         0.04         1.73         3.49         0.63         2.138         4.94         4.22         14.77         8.50           0.15         0.149         1.73         3.49         0.63         2.138         4.94         4.22         14.74         6.50           0.15         0.149         0.73         2.230         0.00         0.63         2.138         4.94         4.22         15.39         0.29           0.13         0.24         0.58         4.86         3.09         1.10         2.640         2.246         4.54         3.24         3.24         3.09           0.64         0.15         0.16         7.80         1.10         4.57         1.10         1.24         4.22         1.24         3.24         0.29         0.24         3.24         0.29         1.64         4.54         3.09         1.64         4.54         4.54         <		0.02	0.21	3.96	0.01	0.02	90.6	1.44	000	29.85	20 77	49.34	1.72
0.02         1.016         1.611         0.18         1.185         1.216         88.75         2.76         2.76         2.147         8.60           0.018         0.034         2.74         0.78         8.77         7.33         0.00         0.06         3.669         2.76         4.04         4.351           0.036         2.70         0.49         1.73         3.49         0.63         2.78         1.78         3.49         0.29         4.94         4.22         15.39         0.29         0.29         2.82         0.00         0.01         4.249         0.61         5.06         4.54         3.426         2.64         2.640         2.66         4.54         4.52         1.539         0.29         2.640         2.66         6.62         1.62         2.64         4.54         1.30         2.66         2.66         2.66         2.66         2.66         2.66         2.64         2.66         2.64         2.64         1.63         3.09         1.00         6.62         1.64         1.33         2.10         1.04         4.54         1.33         2.64         3.69         2.64         2.69         2.64         2.64         2.69         2.64         2.69         2.64		2.72	0.26	47.16	12.56	20.93	11.33	97.43	30.54	8.42	0.11	5.98	4.87
0.18         0.14         0.78         8.77         7.33         0.00         0.06         3.96         4.04         43.51           0.90         0.20         0.24         0.78         3.73         0.00         0.01         42.49         0.06         4.54         4.25           0.13         19.52         0.02         2.280         0.00         0.01         42.49         0.61         50.66         4.54         34.26           28.19         0.12         0.52         0.02         13.79         0.09         0.95         6.62         12.01         25.69         2.64           20.50         0.13         0.58         3.09         1.10         4.57         1.10         1.02         21.64         1.33           0.64         0.28         0.66         78.06         4.10         4.57         1.10         1.02         21.64         1.33           0.64         0.28         0.12         2.69         6.53         2.14         0.04         0.04         1.09         0.64         4.54         1.33           0.64         0.28         0.12         2.26         0.28         0.55         2.14         0.02         1.64         1.33         1.30<		0.02	10.16	16.11	0,18	1.85	12.16	88.75	36.69	2.76	21.47	8.60	37.57
0.30         0.71         0.449         1.73         0.03         4.74         0.63         4.54         0.02         1.73         0.02         2.39         0.00         0.01         4.74         0.61         5.66         4.54         3.426           0.13         1.95         0.02         2.39         0.01         0.09         0.65         0.61         1.00         2.64         4.24         3.426           2.81         0.02         2.39         0.11         0.09         0.69         6.62         1.201         2.68         2.64           0.64         1.22         2.82         0.06         78.06         4.10         4.57         1.10         1.02         1.89         2.10           0.68         0.09         0.15         0.15         0.15         0.10         0.63         3.24         4.10         4.57         1.10         1.02         1.89         2.10         0.00         0.63         3.24         4.10         4.57         1.10         1.02         3.09         1.00         0.01         1.02         1.00         0.04         0.09         0.61         0.02         2.10         0.00         0.01         0.02         0.00         0.02         0.00 </td <td></td> <td>0.18</td> <td>0.94</td> <td>2.14</td> <td>0.78</td> <td>8.77</td> <td>7.33</td> <td>0.00</td> <td>0.00</td> <td>3.96</td> <td>4 04</td> <td>43.51</td> <td>4.71</td>		0.18	0.94	2.14	0.78	8.77	7.33	0.00	0.00	3.96	4 04	43.51	4.71
0.13         19.52         0.02         23.90         13.79         0.09         0.96         6.62         12.01         25.69         2.64           28.19         0.24         0.58         4.86         3.09         1.10         22.46         4.20         21.64         1.33           0.64         0.24         0.58         78.06         78.06         4.10         4.57         1.10         102         182         3.09           0.05         0.10         0.28         0.12         0.12         0.12         0.69         1.60         9.64         3.09           0.06         0.09         0.10         0.12         0.10         0.12         0.10         0.12         0.10         1.89         2.10         0.10         0.10         0.10         0.10         0.10         0.10         0.10         0.04         0.00         0.03         0.03         0.04         0.00         0.03         0.03         0.04         0.00         0.03         0.03         0.04         0.00         0.03         0.04         0.00         0.03         0.03         0.04         0.04         0.03         0.04         0.04         0.03         0.04         0.04         0.04         0.0		8.25	0.21	60.33	5.78	0.00	0.03	42.49	4.94	50.66 50.66	15.59	24.26	1.13
28.19         0.24         0.58         4.86         3.09         1.10         26.90         22.46         4.20         2/164         1.33           0.64         1.29         2.82         0.06         78.06         0.10         1.02         1.62         3.08           20.50         8.12         2.82         0.06         0.15         0.53         3.12         1.00         9.64         3.09           0.68         0.09         3.26         0.26         0.59         15.48         3.26         0.03         1.97         8.23         2.10           0.04         0.13         0.26         0.59         15.48         3.26         0.03         0.93         5.45         6.33         7.30           0.74         0.74         1.26         3.34         4.19         20.47         0.34         18.53         1.49         1.65         30.98           6.74         0.74         0.76         0.14         4.83         91.77         1.91         0.01         1.65         30.98           6.03         0.85         0.74         0.74         4.43         25.48         96.71         1.01         8.62         0.01           6.40         0.00 <td></td> <td>0.13</td> <td>19.52</td> <td>0.02</td> <td>23.90</td> <td>13.79</td> <td>0.09</td> <td>0.95</td> <td>6.62</td> <td>12.01</td> <td>25.69</td> <td>2.64</td> <td>1.46</td>		0.13	19.52	0.02	23.90	13.79	0.09	0.95	6.62	12.01	25.69	2.64	1.46
0.64         1.29         2.82         0.06         78.06         4.10         4.57         1.10         1.02         1.82         3.08           2.050         8.12         0.06         0.78         0.51         26.98         5.77         1.33         1.97         8.23         2.00           0.68         0.08         1.54         2.86         5.77         1.33         1.97         8.23         2.10           0.74         0.12         3.26         0.59         1.548         3.26         4.09         1.09         5.45         6.00         0.04           0.74         0.74         1.26         3.34         4.19         20.47         0.34         18.33         1.49         1.66         30.38           5.2.51         0.28         2.75         7.40         0.14         4.83         91.27         1.49         1.66         30.38           4.0.01         0.00         0.03         8.15         2.548         14.43         25.48         98.61         20.21         8.65         0.01           4.0         2.39         0.08         1.28         2.548         1.443         25.48         98.61         20.21         8.89           4		28.19	0.24	0.58	4.86	3.09	1.10	26.90	22.46	4.20	21.64	1.33	0.02
20.50         8.12         4.96         0.18         0.15         2.53         3.12         1.07         1.60         9.54         3.19           0.68         0.31         0.26         0.26         0.56         15.48         3.26         4.09         1.09         5.45         6.33         2.10           0.04         0.01         0.26         0.59         15.48         3.26         4.09         1.09         5.45         6.33         7.30           0.01         0.12         3.67         1.89         2.12         0.00         0.03         6.63         7.30           0.74         0.76         3.34         4.19         20.47         0.34         1.65         30.38         1.65         30.38         1.65         30.38         1.65         30.38         1.65         30.38         1.65         30.38         1.67         1.67         30.39         28.56         0.01         0.03         1.87         0.01         0.02         0.03         1.87         0.01         0.02         1.87         0.01         0.02         1.87         0.01         0.02         1.87         0.01         0.02         1.87         0.01         0.02         1.87         0.01 <td< td=""><td></td><td>0.64</td><td>1.29</td><td>2.82</td><td>90.0</td><td>78.06</td><td>4.10</td><td>4.57</td><td>1.10</td><td>1.02</td><td>1.82</td><td>3.08</td><td>2.88</td></td<>		0.64	1.29	2.82	90.0	78.06	4.10	4.57	1.10	1.02	1.82	3.08	2.88
0.84         0.34         0.34         0.56         15.48         3.26         4.04         1.09         5.45         6.33         7.30           0.01         0.12         3.67         1.89         2.12         0.00         7.56         0.03         0.03         6.00         0.04           0.74         0.74         1.26         3.34         4.18         2.047         0.34         1.85         3.03         3.03         3.03           52.51         0.28         2.75         7.40         0.14         4.83         91.27         1.91         0.01         9.50         28.55           40.01         0.08         80.26         0.07         0.45         5.24         0.00         0.03         8.15         0.01         9.50         28.55           40.01         2.99         2.94         0.69         1.28         2.548         98.61         20.21         8.62         0.01           9.40         7.51         10.06         5.95         7.45         19.01         16.37         12.15         8.89           12.14         11.20         12.23         30.39         12.15         8.89         12.14         12.14         12.14         12.14 <td></td> <td>20.30</td> <td>8.12</td> <td>3.25</td> <td>0.18</td> <td>0.12</td> <td>0.53</td> <td>3.12</td> <td>1 33</td> <td>20.0</td> <td>40.0</td> <td>3.09</td> <td>15.58</td>		20.30	8.12	3.25	0.18	0.12	0.53	3.12	1 33	20.0	40.0	3.09	15.58
0.01         0.12         3.67         1.89         2.12         0.00         7.56         0.03         0.93         6.00         0.04           7.4         0.74         1.8         20.47         0.34         1.853         1.49         1.65         30.98           5.2.5         0.26         2.75         7.40         0.45         5.24         0.00         0.03         3.83         12.02         1.97           40.01         0.00         0.03         8.15         2.548         14.43         25.48         98.61         20.21         862         0.01           9.40         7.51         10.06         5.94         0.69         1.28         5.95         0.98         1.273         30.39         2.85         0.01           8.99         7.51         10.06         5.93         8.59         7.45         19.01         16.17         13.83         12.15         8.89           11.20         11.20         11.20         11.20         15.21         10.01         10.15         8.89           11.20         11.20         11.20         11.20         11.20         11.12         12.15         8.89           11.20         11.20         11.20		0.84	0.31	0.26	0.59	15.48	3.26	4.09	1,09	5.45	6.33	7.30	16.01
0.74         0.74         1.26         3.34         4.19         20.47         0.34         1853         1.49         1.65         30.98           6.25.1         0.28         2.75         7.40         0.14         4.83         9127         1.91         0.01         95.0         28.55           16.34         0.08         80.26         0.07         0.45         5.24         0.00         0.03         3.83         1.20         1.97           40.01         0.00         0.03         8.15         2.548         14.43         25.48         98.61         20.21         8.62         0.01           9.40         2.39         2.84         0.69         1.28         5.85         0.98         12.23         30.39         2.85         0.01           9.40         7.51         40.00         5.93         8.59         7.45         19.01         16.17         13.83         12.15         8.89           8.99         7.32         7.32         17.20         17.14         17.14         17.14         17.14		0.01	0.12	3.67	1.89	2.12	00:0	7.56	0.03	0.93	6.00	0.04	0.03
6.34         0.28         2.75         7.40         0.14         4.83         9127         1.91         0.01         9.50         28.55           16.34         0.26         0.26         0.07         0.44         5.24         0.00         0.03         3.83         12.02         1.97           4.0.01         0.06         0.03         8.15         25.48         14.43         25.48         98.61         20.21         8.62         0.01           9.40         2.39         2.34         0.69         1.28         5.95         0.98         12.23         30.39         2.85         0.01           9.40         7.51         10.06         5.93         8.59         7.45         19.01         16.17         13.83         12.15         8.89           11.20         11.20         11.20         11.20         11.20         11.20		0.74	0.74	1.26	3.34	4.19	20.47	0.34	18.53	1.49	1.65	30.98	0.26
1.50		52.51	0.28	2.75	7.40	0.14	4.83	91 27	1.91	0.01	9.50	28.55	0.00
0.40         7.51         10.06         5.93         8.59         7.45         19.01         16.17         13.83         12.15         8.89           9.40         7.51         10.06         5.93         8.59         7.45         19.01         16.17         13.83         12.15         8.89           7.32         7.32         7.32         11.20         16.34         12.15         12.14		10.04	900	00.20	0.07 8 15	0.43	97.74	00.00	0.03	3.63	12.02	200	27.98
9.40 7.51 10.06 5.93 8.59 7.45 19.01 16.17 13.83 12.15 8.89 7.32 16.34 16.34 12.14 12.0		0.40	2.99	2.94	0.69	1.28	5.95	0.98	12.23	30,39	2.85	0.0	0.88
8.99 7.32 16.34		9.40	7.51	10.06	5.93	8.59	7.45	19.01	16.17	13.83	12.15	8.89	15.38
11			8.99			7.32			16.34			12.14	
							11.2	0				ļ	

Dose:	100 mg/kg/	day (x2)				z treatment.		7002/60/92				į
N		6527			6529			6526			6530	
lo. BC-07-	228 A   228 B   228 C	1 228 B	228 C	229 A	229 B	229 C	230 A	230 B	230 C	231 A	231 B	231 C
ا ۔ ا	<u>-</u>	12	13	<b>P1</b>	P2	P3		M2	M3		42	윋
	3 11.xls	12.xls	13.xls	P1.xls		P3.xls	M1.xls	M2.xds	M3.xls	H1.xls	H2.xls	H3.xks
No. of cell		% DNA IN Tall			o DIVA IN TA		ı			Į	% DINA IN tall	ŀ
- -	6.61	0.10	19.75	- 1	0.24 41.58	39.88	30.23	13.32	2.83	10.78	10.80	2.86
76	15.33	17.04	0.10	- 1	31.53	2.11	31.86	134	0.43	3.26	14.36	1.67
	14.71	18.06	2.42		3.13	16.75	14.62	4.21	3.07	4.30	4.83	4.06
	8.80	4.34	19.95		15.54	4.21	5.47	0.01	7.10	5.88	11.68	4.63
9	48.36	15.56	1.04	- 1	7.98	1.80	1.50	1.30	13.14	17.11	42.85	41.24
	1.55	25.54	0.00		56.16	13.67	1.68	2.42	90.4	6.12	11.60	8.24
	5.41	0.38	7.52	- 1	10.40	30.40	2.17	19.0	0.35	88.8	0.50	2.07
a Ç	0.48	1 23	24.37	- 1	26.43	2.00	41.22	3 29	13.35	0.73	45.16	24.0
	8.05	9.56	4.85		22.64	06.61	8.57	10.42	96.25	1.22	177	28.88
	7.96	14.23	2.28	1	11.83	1.83	23.09	15.27	12.52	46.66	2.21	18.19
13	1.63	94.40	32.85	1	1.26	5.20	7.50	4.49	0.71	12.39	2.43	92.30
	8.12	22.69	2.98	1	7.42	28.20	45.02	35.34	99'9	0.23	1.30	0.61
	12.57	0.00	60.84		56,31	1.52	4.49	2.59	97.16	36.69	0.41	93.48
	45.94	22.89	13.44		33.08	0.05	0.79	42.84	0.01	21.62	3.46	3.23
	13.51	3.75	6.48	Ιİ	5.56	2.01	35.91	2.47	0.01	24.73	34.60	11.25
	6.39	6.94	1.96	- 1	13.52	24.91	36.48	4.04	39.59	7.87	0.63	0.93
٠	18.69	20.22	15.60		2.97	0.88	1.10	12.20	94.54	6.19	0.29	68.92
	0.01	36.44	6.07		250	0,00	12.20	300	0.33	14.55	2000	23.12
	2.30	3.75	75.56		7.25	83.63	29.60	200	2.43	25.87	200	4 16
	6.02	10.21	74.05	1	14.56	4.48	1.95	8.60	7.71	6.44	32.54	6.34
	5.32	0.83	12.74	1	16.41	9.53	4.77	1.28	7.65	0.62	41.37	7.64
	0.61	3.93	22.26	- 1	15.75	1.32	27.53	16.54	13.52	2.00	0.60	3.22
	0.60	28.11	2.63	- 1	20.47	2.29	32.25	2.17	27.89	3.31	6.17	20.00
	11.29	12.19	3.73	- 1	15.59	7.56	74.80	0.85	70.00	12.04	10.91	0.02
	4,000	10.03	10.1	- 1	72.60	20.7	7.40	C. 4	92.24	19.97	10.00	33.73
	3.30	4.55	0.05		3 86	7 66	08 00	00.20	3.50	20.00	10.03	05.30
	15.06	5.49	2.95	1	18 05	02.7	63.55	283	44.42	0.00	6.43	2.44
	201	23.88	0.17	1	37.70	12.65	7.17	20.62	11.92	1.50	43.30	9 62
	0.12	21.92	0,46	1 1	38.19	4.36	15.10	0.26	0.49	46.59	12.52	1.98
	19.87	1.29	2.95	1 1	13.21	6.85	1.37	0.22	1.70	56.64	16.60	1.10
	8.17	7.34	22.78		43.79	55.76	0.83	0.67	14.85	2.82	0.01	12.56
	6.46	15.95	43.97	- 1	11.07	40.6	5.98	1.57	8.23	3.23	7.52	27.49
	55.07	0.70	2.95		21.08	65.28	24.4	39.33	13.24	0,38 30 55	75.2 19.68	42.04
	29.07	08.87	3 70	- 1	22.34	56.5	0.39	17.98	1 75	808	3.05	8 28
	34.01	1.10	0.53		79.27	76.05	17.50	3.09	10.08	0.82	8.76	95.56
	5.16	1.74	17.39		5.74	5.14	94.32	35.00	2.89	4.21	0.42	17.52
	0.79	17.78	0.08		48.09	1.32	1.90	3.86	6.35	22.19	2.89	89.9
	3.64	77.43	52.75		8.32	1.16	0.05	9,0	8.19	4 62	90.0	9.89
	2 40	5 86	3.45	- 1	93.18	33	60.0	9,03	95.79	30.55	08.0	3.5
	12.17	6.91	17.25		3.22	69.12	0.01	1.46	1.11	10.38	26.98	9.20
	11.08	2.10	9.90	1 1	3.79	9.36	20.96	2.61	0.70	0.90	0.75	14.01
	9.00	1.69	3.99		8.78	19.35	13.55	18.83	95.94	12.88	17.02	49.81
49	9.68	27.48	5.49	- 1	2.05	2.88	31.47	8.80	31.90	10.39	0.83	25.79
97		23.6	15.55	33/						48.9	28.7	
I,	2	14,00	3:30		64.40	10.01	20,02	9.10	70.17	50.4	70.	0
		13.32			17.74			17.19			14 83	

Dose: Animal N°	ingragiual (1)	6534			П		10070007	П	
Slide No. BC-07-	217 A	217 B	217 C	218 A	218 B	218 C	219 A	219B	219 C
ode BC-07-13	¥	¥2	-	- [	F2	F3		NZ	- [
e No. BC-07-13	A1.xls	A2.xls	A3.xls	F1.XIS	F2.xls	F3.XIS	N1.XIS	% DNA in tail	N3.XIS
No. of cell	ı	20 30	I	17.83	80.08	54.48	-	27 43	ı
- 6	73.76	13.84	37.33	30.08	1 10	13.78	7.52	36.00	3.62
100	91.30	29.11	15.05	9.39	4.59	73.83	14.78	21.52	0.85
4	94.56	15.00	93.52	3.06	66.64	62.10	5.77	13.49	24.70
5	82.26	84.95	68.76	49.55	66.01	20.28	7.37	23.18	29.93
9	38.34	52.65	92.41	55.15	0.12	4.42	8.03	29.98	0.20
	47.07	29.42	47.94	61.//	49.72	15.96	33./9	8.18	10.24
æ	5.24	24.88	50.19	04.14	30.10	17.01	14.45	0.00	23.03
20 5	9.24	04.7	32.03	20.77	22.02	45.21	0 07	26.83	1 61
2 5	86.50	80.00	0.53	3.25	64.81	97.79	182	4 90	39.67
10	6168	75.79	20.96	67.75	34.07	72.50	5.20	6.21	19.72
13	76.86	62.22	89.54	27.10	2,82	69.12	15.99	7.66	5.82
14	25.67	31.69	86.73	75.37	33.54	45.83	20.90	0.15	8.07
15	0.15	88.12	16.26	3.45	9.07	96.27	0.05	0.68	4.96
16	16.09	87.02	55.07	12.57	64.54	66.87	16.99	0.02	12.85
17	47.65	55.43	63.60	3.33	20.66	73.85	9.33	17.53	1.29
80	70.30	88.31	87.02	93.52	53.26	90://	2.11	18.98	0.02
18	14.42	40.77	80.12	13.49	0.21	21.09	37.79	0.20	4 80 A
27	87.47	25.54	27.82	21.85	3.35	20.31	20.00	3.70	9 44
22	73.70	94.50	5.96	90.58	25.48	86.83	26.59	43.98	23.62
23	0.00	56.72	74.28	0.16	85 27	96.98	1.78	0.41	5.44
54	31.22	52.38	41.45	22.60	42,36	46.53	15.64	11.11	0.00
25	69.87	29.98	3.90	71.56	5.23	17.86	36 67	2.12	2.70
97	12.99	90.16	19.73	0.25	82.01	75.07	0.44	9.39	1.5
17	20.02	30.76	42.86	57.24	35 33	3.07	700	200	80.0
000	16.58	50.50	62.53	171	06.07	47.66	0.12	4.85	177
300	73.12	53.64	81.30	0.14	74.37	85.89	16.87	26.19	23.13
34	94.03	0.39	90.64	73.05	16,21	20.24	58.21	1.64	7.09
32	86.54	84.54	69.45	47.32	24.55	56.16	54.17	20.68	6.59
33	86.98	91.02	75 89	50 07	11.80	2.54	29.55	23.90	34.90
34	96.42	74.12	12.74	5.04	3.81	10.93	0.77	1.27	33.29
88	18.15	31.80	0.88	/6.63	91.03	27.70	24.90	10.26	1.69
80.	42.63	31.42	8/35	3.70	0.00	57.74	5.75	3.52	26.5
38	8 60	39.25	5.98	9.47	2.17	1.35	7.26	28.60	8.40
30	26.67	38.00	38.94	27.50	11.15	82.49	15.99	0.36	13.18
40	78.55	14.74	3.69	21.28	98.03	83.80	7.86	0.20	18.54
4	87.85	20.79	31.40	21.29	83.48	80.27	4.44	1.56	24.43
42	13.59	11.98	32.44	15.66	62.81	26.76	0.75	8.33	9.02
43	15.60	12.50	63.10	16.91	1.31	16.74	2.43	40.62	17.67
44	94.56	50.05	50.34	46.15	44.14	49.21	11.76	17.92	0.82
46	74.89	54.01	40.60	86.85	6.40	52.51	1.10	2.02	00.0
47	54.57	37.04	65.16	1.31	52.94	50.23	4.22	16.59	2.32
48	25.30	84.66	91.80	4.91	72.81	31.07	36.04	18.37	25.34
49	43.97	68.69	16.60	84.88	17.94	2.02	1.90	0.52	15.95
50	9,00	13.4%		25.75	36.69	37.50	1	14 66	45.48
Mean/singe	43,33	31./4	32.03	33.30	30.06	43.30	12.31	20.	14.19
Manning		30.			28 20				

FSR-IPL 070402 / CATECHOL / RHODIA
Appendix No. 10: Individual values for Nuclei's OTM / DUODENUM

Animal N° Slide No. BC-07- Code BC-07-14 File No. BC-07-14	o IIIg/ng/uay					ע הבשחוובו		100000				
ide No. BC-07- ode BC-07-14 le No. BC-07-14		6512			6514			6511			6515	
ode BC-07-14 le No. BC-07-14 of cell	232 A	232 B	232 C	233 A	233 B	233 C	234 A	234 B	234 C	235 A	235 B	235 C
of cell	5	25.5	03	X 2	ξ ξ ξ	Z 23	2 5	7 22	D3	0 5	025	03
		Olive TailMoment			OliveTailMoment		D	ive TailMoment	1.4		Olive TailMoment	
2. 0. 00		44.97			4.4		ı	11 BE			7.03	
- 2	11.56	18.43	0.71	1.16	0.21	0.39	17.37	42.94	0.84	9.63	0.92	0.02
3	2.78	0.04	00.0	0.12	2.51	3,78	40.99	10.42	00.00	0.05	0.12	26.38
4	22.80	0.15	1.71	8.24	26.58	0.05	32.15	25.47	9.55	0.00	0.03	11.73
5	16.77	0.37	4.92	4.26	0.18	12.35	18.64	4.18	6.02	1.28	44	0.87
9	19.84	0.07	7.18	0.68	0.03	2.72	11.63	10.14	0.00	27.90	72.64	10.01
- 0	88.77	0.00	0.00	3.07	0.70	3.20	20.94	0.00	1.30	0.00	0.0	19.01
00	900	5.40	0.07	38.0	13.30	100	10.02	89.0	200	4.03	21.33	100
9 0	500	2.79	0.03	20.87	151	2.66	1 29	205	45.72	18 19	0.08	0.34
1	14.84	1.19	3.64	0.16	0.23	7.04	0.59	1.25	1.39	0.83	0.27	0.03
12	2.92	0.02	0.14	0.00	4.68	0.01	24.99	14.33	4.53	0.04	0.09	0.00
13	1.17	0.22	0.16	6.32	99.0	2.90	19.26	00'0	0.01	1.14	3.87	0.68
14	1.92	0.00	96'0	26,02	19,60	00'0	0.88	0.13	28.64	7.17	0.01	0.00
15	0.00	0.86	5.72	7.22	19.58	0.01	22.78	0.01	0.03	5.96	17.67	2.87
16	0.10	2.85	15.63	00.00	20.49	13.12	45.99	12.45	0.14	0.15	0.09	9.91
17	0.00	2.97	0.30	0.08	8.54	0.33	0.00	0.37	13.72	0.06	0.19	0.00
18	0.01	26.21	5.17	0.00	0.66	0.21	14.94	4.80	33.26	17.04	1.36	0.09
19	3.25	1.15	0.05	2.35	0.00	1.37	0.91	0.87	16.36	0.03	36.67	12.54
22	36	10.97	9.66	0.00	4.0	0.00	50.6	40.0	17.71	0.0	600	9.0
700	27.00	71.0	1 82	23	20.0	1.04	22.57	0.02	787	22.00	5,00	200
23	133	0.07	7.05	0.00	1.36	4.76	3.12	0.00	0.01	0.01	9.53	0.00
24	27.26	0.16	2.57	11.98	6.39	4.39	52.31	0.84	4.43	9.41	34.16	6.43
25	3.34	0.53	7.86	0.00	1.64	10.78	31.80	1.08	3.13	0.94	0.02	17.04
56	8.73	0.27	0.01	0.02	6.88	0.15	37.80	0.27	0.26	5.02	0.22	0.02
27	0.05	20.37	1.89	0.02	1.29	18.34	42.02	0.38	14.20	2.24	0.06	0.00
28	0.12	90.	10.42	197	2.27	0.44	0.02	1.86	0.02	18.13	30.0	1.55
62	0.38	1.07	2.66	9.32	0.93	2.96	38.41	0.01	11.22	0.00	1.16	0.18
3.5	2,5	0.49	0.40	200	277	0.55	74.64	1 13	6.07	1.08	25.57	0.0
5 8	75	32.02	38	0.00	32.16	16.84	030	204	19.32	2.05	000	13
33	25.95	5.96	0.01	2,61	2.84	20.24	34.25	5.60	24.80	14.76	4.48	6.41
34	24.62	1.24	00.00	16.52	7.18	0.74	19.91	1.24	0.12	0.00	0.29	0.33
35	4.38	0.01	8.12	0.04	10.59	0.00	12.55	5.43	0.26	0.09	35.34	0.28
36	0.00	1.18	0.01	0.70	0.59	0.02	42.60	0.61	0.07	0.26	1.76	1.10
37	0.20	2.45	28.67	0.00	24.72	0.27	0.02	0.10	1.98	1.00	0.07	0.13
20,000	4.34	55.	0.13	0.02	20.6	20.00	3.45	1.3/	9.00	0.08	38	0.04
40	000	00.0	0.74	0.20	0.37	0.02	97.6	0.05	15.18	10,0	33	11 46
41	14.75	2.03	6.18	23.61	8 94	0.00	2.55	0.52	21.23	0.50	0.05	10.05
67	27.45	13.15	27.36	0.10	000	0.70	2.26	10.30	12.71	0.41	0.57	000
43	19.19	000	4.06	0.15	4.55	0.51	4.83	12.02	5.62	000	000	25.70
4	1.45	0.14	1.26	20.70	12.75	0.00	6.56	19.76	7.04	12.76	0.00	5.48
45	4.19	00.00	0.20	0.09	2.95	2.99	2.79	4.63	20.34	0.00	79.7	8.91
46	0.24	14.72	24.77	0.00	0.06	2.46	9.05	0.00	0.30	0.09	0.00	9.30
4/	0.02	2.91	0.07	0.07	13.74	0.00	0.00	0.08	6.95	0.40	0.33	6.62
84	0.23	0.48	2.76	6.23	CC.27	99.67	3.6	18.7	6.27	97.6	0.00	1.99
24 6	0.00	78.0	2.13	0.00	4.33	5.91	3.02	30.00	3.43	1 10	0.20	0.22
Madian/elida			3	44.0	20,0	V By	15.00	156	7.7	70.0	26.0	800
Median/animal		1			Į.	2	2	**	, T		878	20.7

Aginnal N° Silde NG. Code BC-07-14  File No. BC-07-	239 C H3 Als Dment 0.19 0.19 0.00 0.00 0.00 0.00 0.00 0.00	240 A  M1 xls  Olive 4.39 22.89 22.89 22.89 2.00 0.70 2.653 2.00 0.02 13.18 0.10 0.43 14.21 41.31 41.31 6.06 6.06 32.42	240 B M2 M2 M2 As M2 As M2 As M2 As M2 As M3 As M3 As M3 As M4 As M5 As M6 As M6 As M6 As M7	M3. xls M3. xl	S1 AS S1 AS	23.20 S2.248 S2.248 0.08 0.01 0.01 0.01 0.01 0.00 0	S3.xis S3.xis Thent 19.79 0.01 0.05 0.00 0.00 0.00 0.00 0.00 0.00	242 A N1.48 N1.48 OI .219 .219 .219 .249.7	242 B N2.xis N2.xis N2.xis OliveTallMomen 0.10 0.14 26.34 17.79 0.09 0.09 0.09 0.09 0.09 0.00 0.00	N3.48 N3.48
7- 239 A H H H H H H H H H H H H H H H H H H			240 B MZ s MZ s MZ s MZ s MZ s MZ s MZ s MZ		275288378	241 B 282 S2 S2 S2 S2		4	N N N N N N N N N N N N N N N N N N N	
14 H. x4s Olive Ol			3.19 3.19 3.19 1.78 2.49 1.46 4.08 0.07 0.07 1.17 10.71 6.16 11.74 0.51 0.51 0.51 0.51 0.51 0.51 0.51 0.51			82.48 Vel all Mom  1.28  1.18  1.18  1.18  2.151  2.151  0.01  1.97  1.97  1.97  0.00  2.291  2.5.70  2.6.70  0.00  2.6.70  2.6.70  0.00  2.6.70  0.00  2.6.70  0.00  0.00  0.00  0.00	<b> -  </b>		N2.xls	
000 000 000 000 000 000 000 000 000 00			3.19 3.19 1.78 1.78 4.88 4.86 0.07 10.71 10.71 11.74 1		1 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0			Net all Montage 1   10   10   10   10   10   10   10	
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		<b>8</b>	3.19 1.78 2.49 2.49 4.98 6.00 0.07 11.74 11.74 11.74 11.36 13.67 14.09		<b>S</b>	0.29 0.118 0.118 0.118 0.151 0.151 0.005 0.007 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.0000 0.000 0.00	19.79 2.58 0.01 0.00		0.10 0.14 0.14 0.14 17.78 17.78 10.09 10.09 10.09 10.09 10.00	
21.72 33.11 16.62 0.01 0.00 0.00 0.00 0.03 0.03 0.01 0.01		4.39 22.89 11.11 11.13 0.00 0.00 0.00 1.14 11.21 11.21 11.21 11.21 11.21 11.21 11.21 11.21 11.21 11.21 11.21 11.21 11.21 11.21 11.37 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0	2,40 11,78 1,46 1,46 1,46 1,17 1,07 1,07 1,17 1,17 1,17 1,17 1,17	1.19.37 0.03.0 0.03.0 0.05.5 30.46.5 30.46.5 26.95 0.02.5 0.02.5 1.14 10.06 0.46 0.46 0.46 0.46 0.46 0.46 0.46	0.22 0.75 14.54 18.54 18.54 19.06 0.79 0.	1.18 8.45 2.33 2.33 2.33 2.33 34.36 6.55 6.55 1.29 1.29 1.29 1.29 1.29 1.29 1.29 1.29	200 200 200 200 200 200 200 200 200 200	21.35 007 2.19 60.06 60.08 10.89 24.97 24.97 20.50 20.50 20.50 20.60 20.	8 93 9 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	7.52 17.82 24.78 0.03 3.60 0.03 3.60 0.03 1.84 1.84 1.84 1.84 1.84 1.84 1.84 1.84
183.11 16.62 0.01 10.01 10.00 25.62 22.98 22.98 22.98 1.07 1.07 1.07 1.55 1.55 1.55 1.55 1.55 1.55 1.55 1.5		22.89 11.1 6.18 6.18 6.18 2.653 2.00 2.00 1.09 10.10 0.10 0.20 1.14 1.14 1.14 1.14 1.14 1.14 1.14 1.1	1.78 1.49 4.98 4.98 1.00 1.00 1.74 1.74 1.174 1.	0.10 0.33 30.40 26.12 26.12 0.02 0.02 0.03 0.03 0.03 0.03 0.03 0.0	0.00 0.00	8.00 9.00	2.58 6.01 6.01 7.246 6.00 6.00 6.00 6.00 6.00 6.00 6.00 6.	207 219 60.66 10.89 63.80 63.8	8.49 9.44 26.34 17.79 0.46 0.46 0.46 10.78 10.78 10.00 0	1752 0.24.78 0.37.79 0.37.79 0.03.00 0.03.00 0.03.00 0.03.00 0.03.00 0.05.00 0
16.62 0.01 0.00 0.00 0.00 0.00 0.00 0.01		6.18 6.18 0.70 2.6.53 2.6.53 13.18 0.43 14.21 41.37 41.37 41.37 6.06 6.06 6.06 32.42	1.48 4.98 2.18 0.07 10.71 11.74 13.67 14.99	0.733 0.653 0.653 0.002 0.002 0.003	14.75 16.73 16.73 16.73 17.73	2.2.3.3 2.2.3.3 2.2.3.3 2.2.3.3 3.4.3.8 3.4.3.8 3.4.3.8 3.4.3.8 3.6.3.9 3.0.3.9 3.0.3.	0.00 0.00	2.19 60.66 63.89 63.89 24.97 0.19 1.37 20.50 0.16 0.04 45.87 33.37	26.34 26.34 17.79 0.00 0.00 10.78 10.78 12.91 12.91 12.91 10.00 0.00 0.00 0.00 0.00 0.00 0.00	24.78 27.78 27.79 27.79 27.79 20.31 20.81 20.81 1.30 1.25 0.15 0.15
2.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.01 0.01 0.01 0.01 0.01 0.00		26.53 2.00 2.00 2.00 0.92 13.18 14.21 41.21 41.37 1.14 1.14 6.06 6.06 6.06	4 1.46 0.60 0.00 2.18 0.07 11.74 11.74 13.67 0.92 0.92 2.47 2.47	0.05 30.46 30.46 30.46 0.02 0.02 0.02 0.03 0.03 0.03 0.04 0.04 0.04 0.04 0.04	18.434 0.09 0.09 0.73 0.73 0.03 0.03 0.03 1.03 0.03 1.03 0.03 1.03 0.03 0	2.5.33 2.6.33 2.6.73 2.	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.08 63.89 63.89 24.97 0.19 0.24 20.50 1.37 22.00 0.16 0.04 6.58 45.87	26.34 1779 0.00 0.46 0.46 10.78 10.78 12.91 12.91 12.91 12.90 10.0	24.78 0 03 27.79 0 03 3.40 0 02 1 2.86 0 20 1.26 0 1.26 0 1.26 0 1.26 0 1.26 0 1.26 0 1.26 0 1.34 0 1.34 0 1.34 0 1.35
2.76 2.562 2.562 2.298 2.298 0.00 0.00 0.00 0.00 0.01 0.01 1.55 2.48 0.37 0.01 0.		26.53 2.07 2.00 0.92 13.18 0.10 0.10 0.20 0.20 0.06 6.06 6.06 0.31	0.00 0.00 0.07 10.71 10.71 11.74 11.74 13.67 13.67 14.09	30.65 26.95 26.95 26.95 20.00 20	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	2.5.3 2.5.3 2.5.3 2.5.3 2.5.3 2.5.3 2.5.3 2.5.3 2.5.3 2.5.3 3.6.3 3.	23.60 21.90 21.90 21.90 21.90 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00 20.00	10.89 63.89 63.89 6.19 0.19 0.24 5.34 5.34 20.50 20.50 0.16 0.16 8.337	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.55 0.55 0.55 0.55 0.55 0.55 0.55 0.55
25.62 25.62 22.98 22.98 22.98 0.00 0.00 0.00 0.01 0.01 0.01 0.01 1.22 1.22 1.24 0.01 0		26.53 20.02 0.92 13.18 0.10 0.43 14.21 44.37 41.37 41.37 6.06 6.06 6.06	2.18 0.07 0.07 10.71 6.16 11.74 0.51 0.92 9.73 2.47 14.09	8.1.40 26.95 0.02 0.09 2.46 1.18 1.10 25.31 25.31 25.31 25.31 25.31 25.31 25.31 25.31 25.31 25.31 25.31 25.31 25.31 25.31	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.00 0.01 0.01 0.01 0.01 0.01 0.00	33.60 0.74 0.03 0.00 0.00 0.00 0.00 0.00 0.00 0.0	24.02 24.07 0.19 0.24 20.34 20.50 1.37 2.20 0.16 0.04 45.87	0.00 0.46 0.46 12.50 12.51 12.31 12.31 12.31 12.30 0.00 0.00 0.00 0.36 8.93 8.64	2002 2003 2003 2003 2003 2003 2003 2003
25.62 25.62 22.98 0.00 0.00 0.00 0.03 0.01 0.01 0.01 0.01 0.00 0.00 0.00 0.00		2.00 0.10 0.10 0.10 0.20 1.14 1.13 0.06 6.06 8.06 8.06 0.31	0.07 10.71 10.71 6.16 11.74 13.67 0.92 9.73 2.47 14.09	26.95 26.95 0.09 0.09 0.92 1.148 1.148 2.536 2.536 2.536 2.536	18.04 8.73 9.73 9.73 9.73 9.73 9.73 1.38 1.65 3.1.12	6.71 6.71 6.71 6.71 6.71 6.07 6.00	2.3.90 2.46 2.1.90 0.03 0.00 0.00 0.00 0.00 0.00 0.00 0	24.97 0.24 0.24 20.50 1.37 22.00 0.16 0.04 45.87 33.37	2.60 10.78 12.91 12.91 5.30 0.00 0.00 7.10 8.93 8.93 8.93	20.90 20.90 20.90 20.90 1.34 1.34 1.34 1.35 1.35 1.35 1.35 1.35 1.35 1.35 1.35
22.98 22.98 0.00 0.00 0.00 0.01 0.01 0.01 0.01 0.09		10.92 10.10 0.10 14.21 14.21 41.37 0.20 6.06 8.06 32.42	0.07 6.16 11.74 0.51 13.67 0.92 9.73 2.47	2.46 1.18 1.18 2.10 2.5.36 2.5.36 2.81	9.7.3 0.02 0.11 0.36 0.23 1.138 1.138	34.38 6.55 1.97 1.29 0.00 25.70 25.70 25.70 0.00 0.	2.46 2.190 2.190 0.00 0.00 0.00 0.00 0.00 1.00 1.00	0.24 5.34 20.50 1.37 22.00 0.04 45.87 33.37	2.60 2.60 10.78 12.91 5.30 0.00 0.00 0.00 0.00 0.00 0.00 0.00	20.84 20.87 20.87 20.87 20.87 20.87 20.87 20.87 20.87 20.87
0.00 0.00 0.00 0.00 0.13 0.01 0.01 0.01		0.00 0.43 14.21 41.37 0.20 1.14 0.05 6.06 32.42	6.16 11.74 0.51 13.67 9.73 2.47 14.09	0.02 0.05 0.92 0.92 1.18 10.06 2.5.36 2.5.36 2.81	0.02 0.03 0.03 0.03 0.03 0.03 0.02	6.55 6.55 6.001 1.97 1.29 0.00 22.91 25.70 25.70 6.99 6.99	21.40 21.40 0.03 0.00 0.00 0.00 0.00 1.00 1.00 1.0	5.24 20.50 1.37 22.00 0.16 0.04 45.87 33.37	10.70 10.70 10.70 10.00	20.87 20.87 20.87 1.25 1.30 1.30 2.00 2.00 0.55
0.00 0.00 0.00 0.03 0.03 0.01 0.01 1.22 1.22 1.22 0.00 0.00		0.43 14.21 14.21 1.14 1.14 0.06 6.06 32.42 0.31	11.74 0.51 13.67 0.92 9.73 2.47 14.09	2.46 2.46 10.06 2.11 2.51 2.81	1.28 0.79 0.30 0.83 0.83 1.15 0.02	1.97 1.29 1.29 1.29 1.29 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.0	20.50 1.37 22.00 0.16 0.04 45.87 33.37	12.17 5.30 0.00 0.00 7.10 8.93 0.36	20.87 20.87 20.87 1.25 1.25 0.15 0.15 0.65
0.00 0.53 0.53 0.00 0.03 0.01 19.22 7.24 19.22 0.01 0.00		14.21 41.37 0.20 1.14 0.05 6.06 8.06 32.42 0.31	0.51 13.67 0.92 9.73 2.47 14.09	2.46 10.06 2.11 2.5.36 2.81	0.73 0.87 0.87 0.83 0.023 0.023 0.023 0.020	0.01 0.01 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.01 0.04	1.37 22.00 0.16 0.04 45.87 33.37	5.30 0.00 0.00 7.10 8.93 0.36	20.87 1.25 1.25 1.34 1.34 1.34 1.34 1.34 1.34 1.34 1.34
0.00 0.00 0.13 0.01 0.01 0.00 38.07 7.24 0.01 19.22 7.24 0.09		41.37 0.20 1.14 0.05 6.06 32.42 0.31	13.67 0.92 9.73 2.47 14.09	1.18 10.06 2.5.36 0.46 2.81	0.23 0.23 1.38 31.12	1.29 0.00 22.91 22.70 25.70 0.00 0.00 0.99	0.00 0.00 0.00 0.01 0.04	22.00 0.16 0.04 45.87 33.37	0.00 0.00 7.10 8.93 0.36	20.87 1.84 1.25 1.25 0.26 0.15 0.05
0.00 0.00 0.37 2.48 0.00 0.00 0.00 0.00 0.00 0.00 0.00		0.20 1.14 0.05 6.06 6.06 0.31	0.92 9.73 2.47 14.09	25.36 0.46 2.81	0.36 0.23 1.38 1.65 31.12	25.70 25.70 25.70 25.70 25.70 25.70 25.70	0.00 0.00 0.01 0.04	0.16 0.04 45.87 33.37	0.00 7.10 8.93 0.36	1.25 1.25 1.25 1.25 1.34 1.34 1.34 1.36 1.36 1.36 1.36 1.36 1.36 1.36 1.36
1.55 1.47 1.47 0.37 2.48 0.00 0.01 19.22 7.24 7.24 0.01		1.14 0.05 6.06 32.42 0.31	9.73 14.09	25.36 0.46 2.81	0.87 0.23 1.38 1.65 31.12 0.02	4.02 0.00 22.91 25.70 0.00 4.96 0.99	5.06 0.00 0.04 0.04	0.04 45.87 33.37	7.10 8.93 0.36	1.30 0.26 0.15 0.15 0.65
1.47 0.13 0.37 0.00 38.07 1.92 7.24 0.01 1.922 7.24 7.24		0.05 6.06 32.42 0.31	14.09	25.36 0.46 2.81	0.23 1.38 1.65 31.12 0.02	0.00 22.91 25.70 0.00 4.96 0.99	0.00	45.87 33.37	0.36	0.15 0.15 0.15 0.65
0.13 0.37 0.37 0.00 0.00 19.22 7.24 0.09		6.06 32.42 0.31	14.09	2.81	1.38 1.65 31.12 0.02	22.91 25.70 0.00 4.96 0.99	0.04	33.37	0.36	0.26 0.15 0.05 0.65
0.37 0.37 0.00 0.01 19.22 7.24 1.24 0.01		32.42		2.81	1.65 31.12 0.02	25.70 0.00 4.96 0.99	0.04		8 64	0.15 0.00 0.65
2.48 0.00 38.07 0.01 19.22 7.24 0.09		0.31	46.17		31.12 0.02	0.00	1 40	8.40	5	0.15 0.65 0.65
36.07 36.07 0.01 19.22 7.24 0.09			1.03	0.02	0.02	0.99	D #	0.85	30.22	0.65
36.07 0.01 19.22 7.24 0.09		3.12	10.46	2.36		66.0	00'0	0.11	9.15	0.65
19.22 19.22 7.24 0.09		20.83	0.36	0.14	000	000	41.07	0.67	1.37	
19.22 7.24 0.09		0.82	0.04	13.06	0,00	8.93	0.08	1.86	2.16	4.16
0.09		8.94	0.62	3.89	0.11	000	0.09	16.56	1.56	90.0
0.09		0.41	33.80	11.69	0.34	2.86	13.52	3.19	10.83	31.84
0		8.16	7.69	6.25	0.05	0.57	6.01	1.01	10.10	11 02
0.0		0.00	0.00	0.34	0.01	0.77	0.10	1.01	16.04	0.0
5.97		0.33	8.23	0.01	11.06	0.00	1.43	22.72	2.57	10.07
18.79		0.25	5.27	1.29	0.01	0.00	2.21	23.26	90.	0.50
0.19		0.23	1.57	3.75	00.00	5.70	0.02	0.08	0.02	0.80
17.98		08.4	200	10.07	32.13	9	000	2.5	3.6	0.72
0,20		000	12.04	45,05	0.02	70.07	0.00	0.00	10.00	0.30
24:10		2000	0.27	45.78	7.74	300	10.4	1 88	0.30	24.54
3.08		0.00	14.41	8 95	000	5 24	40.08	9.55	111	28 19
033		0.80	17.38	23.33	0.01	6.51	5.35	0.61	0.03	165
0.23		0.65	8.39	0.62	0.29	19.10	41.58	25.82	3.18	0.15
0.64		5.79	9.21	0.20	0.61	3.76	9.97	2.54	0.00	0.26
33.97		0.02	27.76	1.96	00'0	1.12	15.40	0.01	0.62	0.01
0.02		2.22	3,85	0.20	27.93	0.32	1.54	0.62	0.27	1.28
0.71		0.78	8.09	0.00	0.00	34.30	0.03	5.74	0.04	0.22
0.93		0.40	1.23	1.30	0.00	0.01	16.89	1.71	1.34	0.20
0.07		0.28	25.95	20.75	12.63	0.03	23.10	11.42	0.21	40.13
3.55		0.76	24.23	2.90	200	40.04	000	31.23	0.30	0.03
0.00		47.24	1.45	1.28	300	0.06	24.44	9.67	0.20	20.02
50.0		70.0	121	4.72	900	938	0.09	8 23	003	22.62 22.48
33.78	1	2.17	9.67	0.18	000	3.05	0.16	4.60	0.92	0.05
2.03	8.15	0.00	9.78	0.42	0.01	10.41	27.41	1.53	0.10	10.
00'0		6.90	12.38	2.41	30.58	00.0	0.08	09.9	33.78	0.01
slide 0.91	96'0	0.87	6.03	1.50	0.20	1.57	0.60	3.89	1.10	1.27
			2.18			0.59			1.60	

Name	Dose: Animal N°	200 mg/kg/	1g/kg/day (xz) 6524			6521	z reament		6522			6525	
Color	lide No. BC-07-	243 A	243 B	243 C	244 A	244 B	244 C	245 A	245 B	245 C	246 A	246 B	246 C
CD-7-14         A 1346         A 2346         P 1348         P 2346         P 1348         P 2348         L 1348	ode BC-07-14	A1	A2	A3	P1	P2	P3	17	1.2	F3	E	E2	E3
1.038   0.007   1.509   0.009   0.002   0.003   0.00	ile No. BC-07-14		A2.xls			P2.xls			L2.xls	L3.xls	E1.xls	E2.xls	E3.xls
0.38         0.07         2.83         0.59         3.50         2.85         3.83           13.09         0.05         1.960         0.00         0.00         4.87         22.95           0.22         2.65         0.64         47.33         0.05         19.46         33.53           0.02         2.76         0.65         1.34         2.81         0.05         19.47         2.80           5.06         0.03         8.97         1.34         2.81         0.05         1.62         0.01           4.78         0.04         3.41         2.81         0.05         1.89         1.61         4.44           0.07         3.22         0.04         1.83         0.01         2.83         0.01         1.68           0.07         3.22         0.04         2.77         2.82         0.02         0.19           0.07         3.22         0.05         1.83         0.01         1.89         0.01         1.18           0.07         3.22         0.03         1.83         0.04         2.86         0.02         0.01         1.18           0.08         0.09         0.03         0.04         0.05         0.02	o. of cell		iveTailMome	ĻΙ		ive TailMom	L.		ve FailMome		П	OliveTailMomen	-
13.03         0.03         19.60         4.87         2.86         3.81         2.80         7.21           0.22         3.56         0.84         47.33         0.05         19.87         7.21           0.02         3.56         0.84         47.33         0.05         19.89         7.21           0.00         2.76         0.05         8.97         3.81         0.00         15.82         7.21           0.00         2.76         0.05         0.04         2.71         0.00         11.75         0.01           4.78         0.05         0.04         2.71         2.632         0.00         11.75         0.01           4.78         0.06         0.01         7.83         0.05         0.00         11.75         0.01           4.78         0.06         0.01         7.83         0.05         0.00         11.72         0.00         11.72         0.00         11.72         0.00         11.72         0.00         11.72         0.00         11.72         0.00         11.72         0.00         11.72         0.00         11.74         11.82         0.00         11.74         11.82         0.00         0.00         11.72         0.00		0.38	0.07	2.38	0.59	3.50	29.59	33.83	22.21	26.21	19.61	0.00	15.30
0.22         3.55         9.49         19.93         0.10         15.62         7.21           0.00         2.2.6         0.54         16.93         0.10         15.62         7.21           5.06         0.03         8.97         1.34         0.05         1.73         0.05           5.06         0.03         8.97         2.81         0.05         1.13         4.43           4.78         0.04         3.41         2.81         0.05         1.12         0.01           4.78         0.05         0.04         2.77         0.283         0.07         1.12           4.35         1.52         0.03         1.65.4         0.01         1.65.4         0.00         1.172           1.24         0.01         1.837         0.12         0.01         1.172         0.01         1.172           1.24         0.01         1.65         2.157         8.67         6.22         0.01         1.172         0.07         1.172         0.07         1.172         0.07         1.172         0.07         1.172         0.07         1.172         0.07         1.172         0.07         1.172         0.07         1.172         0.07         1.174 <t< td=""><td>7</td><td>13.03</td><td>0.03</td><td>19.60</td><td>0.00</td><td>0.02</td><td>19.8/</td><td>29.07</td><td>9.45</td><td>14.91 23.55</td><td>47.12 5.38</td><td>0.11</td><td>1.05</td></t<>	7	13.03	0.03	19.60	0.00	0.02	19.8/	29.07	9.45	14.91 23.55	47.12 5.38	0.11	1.05
0.00         2.76         0.51         1.34         0.96         0.31         44.43           5.06         0.02         8.97         3.87         19.29         17.51         0.01           31.70         0.05         9.97         7.36         0.05         0.01         1.36           4.78         0.04         3.24         22.70         2.65.2         0.00         1.196           4.78         0.04         3.44         22.70         2.65.2         0.00         1.196           4.78         0.05         0.04         1.83         0.02         0.19         0.19           2.8.7         0.15         0.15         0.02         0.01         1.15         0.19           1.37         0.00         0.01         1.67         0.02         0.01         1.67           0.00         1.30         0.00         1.67         0.02         0.02         0.02           0.00         1.30         1.67         0.02         0.04         0.15         0.15           0.00         1.30         1.67         0.02         0.01         1.67         0.02         0.01           0.00         1.30         1.82         0.01         <	9	0.22	3.55	9.49	19.93	0.10	15.62	721	0.77	2.27	1.57	0.02	18.05
31,06         0.03         8.97         387         1929         1751         0.01           31,06         0.03         8.97         341         2.81         0.05         0.00         1.01           4,78         0.04         0.44         2.71         2.63         0.00         1.172           4,38         1.52         0.72         0.65         16.01         0.01         11.72           4,38         1.54         0.01         18.37         0.01         16.34         0.01         17.71           1,24         0.01         18.37         0.01         15.54         20.14         0.36         16.10         0.01           1,24         0.01         18.37         0.01         15.54         20.04         0.03         0.01         17.71         1.82         0.01         0.03         0.03         0.04         0.03         0.04         0.03         0.04         0.03         0.03         0.03         0.03         0.04         0.03         0.04         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.03         0.0	2	00.0	2.76	0.51	1.34	96.0	0.31	44.43	3.35	3.81	0.37	27.24	7.41
47.70         0.05         0.01         7.58         0.05         0.00         11.96           47.70         0.05         0.01         7.70         2.8.32         0.00         11.72           4.35         1.52         0.49         27.70         2.8.32         0.00         11.72           2.82.9         0.15         0.63         16.54         26.72         30.16         17.72           2.82.9         0.15         0.00         81.5         27.70         2.8.32         0.00         11.72           1.37         0.00         81.5         27.70         2.8.32         0.00         11.72           1.37         0.00         81.5         27.57         28.50         0.27         0.77           0.00         1.67         0.00         4.26         0.01         0.18         2.17         0.27           0.00         1.00         1.00         1.00         0.01         1.18         2.17         0.00         1.17           0.00         1.00         1.00         0.01         1.00         0.01         1.14         0.07           0.00         1.00         0.01         1.00         0.02         0.00         0.01         0	9	5.06	0.03	8.97	3.87	19.29	17.51	0.01	6.78	20.21	2.32	18 54	8.05
4.35         3.24         3.49         27.71         2.63         18.70         18.70           4.35         1.52         6.73         0.12         0.65         18.10         0.19           2.82         1.52         6.73         0.12         0.65         18.10         0.19           2.82         0.15         0.15         6.73         0.12         0.65         18.10         0.19           1.24         0.05         0.06         1.57         8.21         20.14         4.78         0.01         0.19           6.52         0.22         0.22         0.01         1.87         0.01         1.86         2.220           0.00         1.00         1.63         3.08         1.31         1.86         2.20         4.79         0.01         0.01         0.16         4.79         0.01         0.18         2.120         0.01         0.16         0.01         0.11         1.86         0.01         0.11         1.86         0.00         0.16         0.00         0.16         0.00         0.14         0.16         0.00         0.16         0.00         0.16         0.00         0.16         0.00         0.16         0.10         0.16         0.16 <td>/</td> <td>31.70</td> <td>0.05</td> <td>3.44</td> <td>7.58</td> <td>0.05</td> <td>0.00</td> <td>11.96</td> <td>14.50</td> <td>6.73</td> <td>0.15</td> <td>5.59</td> <td>8.71</td>	/	31.70	0.05	3.44	7.58	0.05	0.00	11.96	14.50	6.73	0.15	5.59	8.71
4.35         1.52         6.73         0.12         0.65         16.10         0.16           2.8.79         0.15         0.63         16.54         36.72         6.22         30.16           1.24         0.01         18.37         0.01         6.55         0.21         0.38           1.24         0.00         10.01         18.37         0.01         6.55         0.01         0.08           3.01         0.02         0.00         1.00         1.00         0.09         1.00         0.08           0.60         1.00         1.00         1.00         1.00         0.00         1.00         0.00           0.60         1.00         1.00         1.00         0.01         0.00         1.00         0.00         1.00         0.00         1.00         0.00         1.00         0.00         1.00         0.00         1.00         0.00         1.00         0.00         1.00         0.00         1.00         0.00         1.00         0.00         1.00         0.00         1.00         0.00         1.00         0.00         1.00         0.00         1.00         0.00         1.00         0.00         0.00         1.00         0.00         1.00 <td>0 0</td> <td>4.70</td> <td>3.25</td> <td>0.49</td> <td>27.70</td> <td>25.32</td> <td>00.0</td> <td>11 72</td> <td>0.07</td> <td>8 10</td> <td>10.73</td> <td>0.02</td> <td>0.43</td>	0 0	4.70	3.25	0.49	27.70	25.32	00.0	11 72	0.07	8 10	10.73	0.02	0.43
28.29         0.15         0.83         15.54         36.72         6.22         30.16           1.37         0.00         18.37         21.57         8.21         20.21         0.077           1.24         0.00         18.37         21.57         8.21         20.14         0.077           1.24         0.01         8.15         21.57         8.21         20.14         0.077           0.60         1.30         0.01         16.76         0.02         17.99         25.50           0.60         1.30         10.34         0.02         0.00         16.52         25.51           0.60         1.30         10.34         0.22         0.00         16.52         25.51           0.50         1.30         10.34         0.22         0.00         16.52         25.51           0.50         1.20         0.01         0.14         0.22         16.52         25.51           0.50         1.02         0.02         0.04         10.22         16.52         25.51           0.50         0.02         1.02         0.02         0.04         10.22         16.52           1.50         0.02         0.02         0.04 <t< td=""><td>10</td><td>4.35</td><td>1.52</td><td>6.73</td><td>0.12</td><td>0.65</td><td>18.10</td><td>0.19</td><td>16.80</td><td>0.18</td><td>9.47</td><td>2.13</td><td>1.10</td></t<>	10	4.35	1.52	6.73	0.12	0.65	18.10	0.19	16.80	0.18	9.47	2.13	1.10
1.37         0.00         18.37         0.01         55.50         0.21         0.77           1.24         0.02         30.74         2.157         8.550         0.21         0.77           6.52         0.02         30.74         3.06         13.11         16.62         47.36           0.00         7.00         0.00         1.30         16.34         8.20         3.82         0.01         16.32           0.00         7.00         1.30         16.34         8.20         3.82         10.85         25.21           0.00         7.00         1.00         0.45         0.10         11.44         2.46           0.50         0.20         1.65         2.70         1.27         2.20         47.30           0.50         0.20         1.55         2.70         1.27         0.22         16.50           0.50         0.20         1.55         2.70         1.27         0.04         1.65         2.49           0.50         0.20         1.55         2.70         1.27         0.00         2.20         1.63         2.43         0.00         1.63         2.43         0.00         0.00         0.00         0.00         0.00	11	28.29	0,15	0.83	15.54	36.72	6.22	30.16	0.27	12.62	0.11	0.28	0.03
6.52         0.07         8.15         27.57         82.71         22.014         4.036           6.52         0.02         3.07         4.26         0.01         0.62         25.01         4.036         20.01         0.62         25.01         0.65         20.00         15.90         0.06         15.90         10.05         10.06         15.90         10.06         15.90         10.06         15.90         10.06         15.90         10.06         15.90         10.02         10.00         16.50         10.00         16.50         10.00         16.50         10.00         16.50         10.00         16.50         10.00         16.50         10.00         16.50         10.00         16.50         10.00         16.50         10.00         16.50         10.00         16.50         10.00         16.50         10.00         16.50         10.00	12	1.37	0.00	18.37	0.01	55.50	0.21	0.77	16.84	7.62	0.22	0.46	20.56
3.01         0.02         0.03         0.03 <th< td=""><td>13</td><td>1.24</td><td>0.01</td><td>8.15</td><td>75.15</td><td>12.41</td><td>20.14</td><td>0.36</td><td>1.47</td><td>1.27</td><td>5.04</td><td>0.61</td><td>2.05</td></th<>	13	1.24	0.01	8.15	75.15	12.41	20.14	0.36	1.47	1.27	5.04	0.61	2.05
0.60         7.00         0.01         16.76         0.92         16.95         25.81           0.00         7.00         0.01         16.76         0.92         16.95         25.81           2.57         1.13         16.34         8.20         3.82         0.00         16.52           2.57         1.02         0.11         0.45         0.20         1.144         24.65           0.50         0.20         1.55         2.70         12.77         0.02         16.50           1.3.51         34.09         0.02         0.04         1.02         4.30         1.65           0.01         1.90         0.00         0.04         1.02         4.44         1.02         4.44           0.01         1.97         0.00         0.00         0.00         0.00         2.93         2.93           0.01         1.97         0.00         0.00         0.00         0.00         2.93         2.84         4.30           0.01         1.97         0.00         0.00         0.00         0.00         0.00         2.93         0.00         2.93         0.00         2.93         0.00         2.93         2.84         0.00         2.94	4 4	3.03	0.22	30.74	3.00	200	0.07	24.29	1 4.07	73.07	0.00	0.00	20.2
0.00         1.30         16.34         8.20         3.82         0.00         16.52           2.57         1.12         19.09         0.74         0.20         5.01         0.65           0.59         1.02         0.15         2.70         12.77         0.22         16.90           1.351         34.09         0.02         0.02         10.04         2.65         2.65           1.351         34.09         0.02         0.02         0.04         10.23         44.30           1.351         34.09         0.02         1.07         0.02         10.22         16.90           1.351         34.09         0.02         1.04         0.00         1.04         44.30           0.01         1.02         0.00         1.01         1.56         0.00         2.69           0.01         1.02         0.00         1.00         1.00         0.00         2.44.30           1.26         0.07         0.00         1.36         4.34         4.66         0.00         0.00         1.47.0         0.00         1.47.0         0.14         4.52         0.00         1.47.0         0.14         4.52         0.14         1.17         1.27 <t< td=""><td>19</td><td>09.0</td><td>2007</td><td>0.0</td><td>16.76</td><td>0.92</td><td>15.95</td><td>25.91</td><td>5.16</td><td>20.58</td><td>0 03</td><td>000</td><td>140</td></t<>	19	09.0	2007	0.0	16.76	0.92	15.95	25.91	5.16	20.58	0 03	000	140
257         112         19.09         0.74         0.20         5.01         0.65           0.59         1.02         0.112         0.185         2.70         10.44         24.61           0.59         1.02         0.102         0.02         10.04         10.23         44.30           7.15         0.40         0.002         1.07         0.04         10.23         44.30           1.17         0.46         0.00         1.97         0.04         10.23         44.30           0.01         1.90         38.08         4.34         4.66         9.31         5.09           0.01         1.90         0.00         0.39         0.05         0.00         30.82           1.260         0.14         4.328         1.18         2.24         0.00         1.41         1.42         1.42         0.00         1.41         1.42         0.00         0.00         0.00         1.41         1.42         0.00         1.41         1.42         0.00         0.00         0.00         1.41         1.42         0.00         1.41         1.42         0.00         0.00         0.00         1.42         0.00         1.43         0.00         0.00         0.00	17	0.00	1.30	16.34	8.20	3.82	0.00	16.52	1.61	4.64	3.99	13.56	0.01
0.59         1,02         0,11         0.45         0,10         11,44         24,61           13.51         34,09         0.02         1,97         0.07         0.02         16,90           13.51         34,09         0.02         0.02         0.02         1,02         14,30           8.62         0.46         0.00         0.02         0.00         30.65         2.95           9.01         1.97         38.08         4.34         4.66         9.31         5.09           3.18         6.70         1.19         38.08         4.34         4.66         9.31         5.09           3.18         6.97         1.00         0.39         0.05         0.00         3.08           1.2.60         0.14         4.328         1.16         0.00         0.00         1.27           0.27         0.00         0.80         3.68         6.93         1.2.10         14.77           0.14         3.20         0.89         1.2.49         0.14         4.77         0.16         3.05           0.10         1.14         4.74         4.74         4.74         4.74         4.74         4.77         0.16         2.37         0.00	18	2.57	1.12	19.09	0.74	0.20	5.01	0.65	0.35	2.16	12.70	1.20	0.89
1.35 / 1         3.400         1.35         2.70         12.77         10.20         2.95         4.30           7.17         0.46         0.00         1.97         0.00         9.66         2.95           7.17         0.46         0.00         1.97         0.00         9.66         2.95           0.01         1.90         3.89         0.02         0.00         0.00         30.82           0.01         1.90         3.89         0.72         0.00         0.06         0.05         0.00           1.2 60         0.14         43.28         1.18         4.66         9.31         5.00           0.27         0.00         0.80         3.68         6.93         12.10         14.77           0.11         3.21         4.66         0.00         0.00         17.11         4.70         0.14         4.52           0.00         0.00         1.7.11         4.70         0.11         8.24         4.52           0.00         1.2.39         7.17         0.16         2.42         4.31         1.17           0.00         1.2.45         10.76         0.18         0.24         0.55         4.31         1.17	19	0.59	1.02	0.11	0.45	0.10	11.44	24.61	22.07	3.30	4.20	11.41	5.54
7.17         0.00         1.97         0.00         2.65           8.62         0.47         4.77         0.11         1.56         0.00         2.68           8.62         0.47         4.77         0.11         1.56         0.00         2.68           9.81         0.72         0.00         0.69         4.34         4.56         0.00         20.80           1.2.60         0.14         4.13         1.88         3.62         1.25         24.90           1.2.60         0.14         4.33         1.18         1.25         2.4.90           0.27         0.00         0.80         3.68         6.93         1.2.10         14.70           0.24         0.14         4.32         1.26         0.00         2.4.80         3.65           0.14         4.32         1.45         3.74         4.70         0.14         8.24         4.52           0.00         1.71         4.70         0.11         8.24         4.52         1.77           0.84         0.14         4.70         0.14         8.24         4.52         1.77           0.84         0.13         1.2.9         1.45         1.2.6         2.2.86	24	13.54	34 00	0.00	2.70	12.1/	10.22	16.90	4.74	4.34	8.88	0.00	12.34
8.62         0.47         4.77         0.11         1.56         0.00         30.82           0.01         1.90         38.08         4.34         4.66         9.31         5.09           3.89         0.72         0.00         0.39         0.05         26.09           1.260         0.14         43.28         1.13         7.82         3.62         1.25         24.90           0.27         0.00         0.14         43.28         1.13         0.00         25.70           0.11         3.21         4.67         27.45         37.94         0.14         14.77           0.08         0.00         17.11         4.70         0.17         82.4         4.52           0.09         1.71         4.70         0.17         82.4         4.55         3.05           0.00         1.481         0.00         0.87         8.08         1.17         4.50           2.84         0.13         1.50         0.00         0.87         8.08         1.17           2.844         0.13         1.50         0.00         0.87         8.08         1.17           2.844         0.13         1.50         0.00         0.18	22	7.17	0.46	0.00	1.97	00:00	9.66	2.95	3 99	0.00	10.30	0.20	200
0.01         1.90         38.08         4.34         4.66         9.31         5.09           3.89         0.72         0.00         0.39         0.05         0.00         5.09           3.18         6.90         1.13         7.82         3.62         1.26         0.00           0.27         0.04         4.328         1.16         0.00         2.65.70           0.27         0.00         0.88         1.16         0.00         1.67         1.47           0.04         1.41         3.09         1.2.39         7.17         0.16         5.94           0.09         0.00         14.81         0.00         0.87         8.08         1.17           2.84         0.13         1.545         0.00         0.87         8.08         1.17           42.44         0.13         1.545         0.00         0.08         0.88         1.17           42.44         0.13         1.545         0.00         0.08         0.18         1.17           12.42         0.23         0.242         0.42         0.42         0.55           12.42         0.23         1.245         0.00         0.06         0.10         1.11	23	8.62	0.47	4.77	0.11	1.56	0.00	30.82	3.03	0.12	7.71	3.07	0.03
3.89         0.72         0.00         0.60         0.39         0.05         24.90           12.60         0.14         43.28         1.16         0.00         0.05         26.70           0.27         0.00         0.14         43.28         1.16         0.00         0.00         25.70           0.11         3.21         4.77         27.48         0.14         5.94         0.14         5.94           0.11         3.09         12.39         7.17         0.04         0.14         5.94           0.00         0.00         17.11         4.70         0.11         8.24         4.52           0.00         1.24         0.12         2.42         0.14         5.94           0.00         1.39         0.00         1.376         2.42         4.31         12.08           1.6.74         0.88         1.30         0.00         0.00         0.01         0.42         0.55           1.6.74         0.88         1.40         0.00         0.00         0.12         1.11         1.60           2.54         0.00         2.42         0.11         1.13         2.84         0.22           0.57         1.139	24	0.01	1.90	38.08	4.34	4.66	9.31	5.09	0.93	0.39	90.0	12.30	9.33
1.2 60         0.340         4.13         7.02         3.02         2.4.20         2.4.20           0.27         0.00         0.38         3.68         6.93         12.10         14.77           0.11         3.21         3.68         6.93         12.10         14.77           0.01         0.01         3.21         3.68         6.93         12.10         14.77           0.02         0.00         17.11         4.70         0.11         8.24         4.52           0.02         0.00         17.11         4.70         0.11         8.24         4.52           0.08         0.00         17.11         4.70         0.11         8.24         4.52           2.84         0.13         15.76         2.42         4.31         1.77           2.84         0.13         15.76         2.42         4.31         1.77           16.74         0.86         1.00         0.06         0.01         1.17         1.65           1.24         0.86         1.29         1.772         0.12         1.88         22.86           0.57         1.16         0.72         1.88         22.86         2.86           0.57	52	3.89	0.72	0.00	0.60	0.39	0.05	0.00	3.04	4.36	0.00	5.61	19.65
0.27         0.00         0.86         3.68         6.93         12.10         14.77           0.11         3.21         4.67         27.45         37.94         0.14         5.94           0.94         1.41         3.09         12.45         37.94         0.14         5.94           0.08         0.00         17.11         4.70         0.11         8.24         4.55           0.08         0.00         17.11         4.70         0.17         8.24         4.55           2.84         0.13         1.56         2.42         4.31         12.06         3.65           1.6.74         0.30         1.481         0.00         0.87         8.08         1.17           1.6.74         0.30         1.49         0.00         0.01         1.11         1.65           1.2.42         0.23         1.20         0.06         0.18         0.42         0.55           1.2.42         0.23         1.29         1.02         1.88         22.86           0.57         1.168         1.124         0.92         0.01         2.18           2.1.04         1.46         0.00         0.00         0.56         0.30         2.284 <td>07</td> <td>12.60</td> <td>0.90</td> <td>43.28</td> <td>1.02</td> <td>3.02</td> <td>00.0</td> <td>25.70</td> <td>0.70</td> <td>3.78</td> <td>5.48 6.05</td> <td>9.04</td> <td>9.30</td>	07	12.60	0.90	43.28	1.02	3.02	00.0	25.70	0.70	3.78	5.48 6.05	9.04	9.30
0.11         3.21         4.67         27.45         37.94         0.14         5.94           0.094         1.41         3.09         1.2.39         7.17         0.16         5.94           0.09         0.00         17.14         4.70         0.16         5.94         4.55           0.08         0.00         17.14         4.70         0.16         5.05         1.17           2.84         0.13         1.545         0.00         0.08         0.18         4.21         1.2.08           42.44         0.39         0.00         0.06         0.18         0.42         0.52         1.17           12.42         0.23         1.40         6.23         0.01         1.11         1.65           1.2.42         0.23         1.29         0.01         1.11         1.65         0.56           2.91         1.124         0.29         0.02         0.10         22.86         0.10         22.86           2.70         1.168         1.124         2.97         0.12         1.18         22.86         0.10         22.86         0.10         22.86         0.10         22.86         0.10         22.86         0.10         22.86         0	28	0.27	00.0	0.80	3.68	6.93	12.10	14.77	25.	23.48	633	800	3.20
0.94         1.41         3.09         12.39         7.17         0.56         3.05           0.00         0.00         17.11         4.70         0.01         8.24         4.52           0.68         0.00         14.81         0.00         0.87         8.08         1.17.08           4.24         0.13         15.45         13.76         2.42         4.31         12.08           4.2.44         0.88         1.00         0.00         0.018         0.04         0.55           16.74         0.88         1.29         1.52         5.02         7.93         3.68           2.91         0.00         24.38         2.97         0.012         1.18         22.86           0.57         11.68         1.13         2.405         7.72         0.30         2.28           0.57         11.68         1.03         2.045         2.28         0.01         2.28           21.04         1.46         0.00         0.00         5.68         5.02         0.02           21.04         1.46         0.00         0.00         5.88         5.02         0.02           21.04         1.46         0.03         0.04         0.03	53	0.11	3.21	4.67	27.45	37.94	0.14	5.94	7.03	6.58	1.20	25.04	0.74
0.00         0.00         17.11         4.70         0.11         8.24         4.52           2.84         0.00         14.81         0.00         0.87         8.08         1.17           2.84         0.13         15.45         10.06         0.08         0.01         0.02         1.17           16.74         0.86         1.00         0.06         0.06         0.01         0.02         0.05           12.42         0.23         1.29         15.22         5.02         7.93         3.68           0.57         1.68         1.29         0.01         1.88         22.86         0.10         22.86           0.57         1.68         1.73         0.02         1.72         0.10         22.86           0.57         1.68         1.74         0.99         0.10         23.55           2.70         1.03         2.13         2.405         7.72         0.30         2.84.5           2.104         1.46         0.00         0.00         0.00         5.68         5.02         0.02           2.104         1.16         0.00         0.00         5.68         6.03         0.54.0         5.02           2.104	30	0.94	1.41	3.09	12.39	7.17	0.56	3.05	0.36	8.19	0.04	0.50	16.12
0.68         0.100         14.81         0.00         0.87         8.08         1.17           2.84         0.100         14.81         10.00         0.087         8.08         1.17           42.44         1.39         0.00         0.00         0.12         0.42         0.55           12.42         0.23         1.40         6.23         0.01         1.11         1.65           12.42         0.23         1.29         1.27         0.02         7.93         3.68           2.91         0.00         24.38         2.97         0.12         1.88         22.86           0.57         11.68         11.24         0.92         0.09         0.10         23.55           22.79         10.39         2.13         24.05         7.72         0.30         2.845           6.00         0.91         2.045         2.28         0.01         2.845         0.02         2.845           6.00         0.91         1.03         0.04         32.08         6.03         2.640           30.89         8.49         1.97         3.08         6.51         5.40           46.62         0.13         2.26         2.19         0.01 <td>31</td> <td>0.00</td> <td>0.00</td> <td>17.11</td> <td>4.70</td> <td>0.11</td> <td>8.24</td> <td>4.52</td> <td>0,54</td> <td>11.90</td> <td>0.43</td> <td>16.24</td> <td>7.24</td>	31	0.00	0.00	17.11	4.70	0.11	8.24	4.52	0,54	11.90	0.43	16.24	7.24
42.44         1.39         0.340         0.342         0.420         0.424         0.420	32	20.08	0.00	14.81	13.76	0.87	8.08	12.00	44	92.67	7.43	19.34	10.15
16.74         0.86         1.40         6.23         0.01         1.11         1.65           2.91         0.023         1.29         15.22         5.02         7.93         3.68           2.91         0.00         2.43         2.97         0.12         1.88         22.86           2.57         11.68         11.24         0.92         0.09         0.10         23.55           2.70         10.39         2.13         24.05         7.72         0.30         2.85           2.104         1.46         0.00         0.00         0.00         5.58         5.02         0.02           2.104         1.46         0.00         0.00         5.58         5.02         20.52           2.104         1.46         0.00         0.00         5.58         5.02         0.02           30.85         6.0         0.0         0.85         6.0         0.02         23.52           1.301         5.31         1.00         0.04         0.77         1.39         5.75           1.01         0.00         2.19         0.72         1.39         5.75           1.01         0.00         2.19         0.72         1.39         <	34	42.44	1.39	00.0	0.00	0.18	0.42	0.55	700	98.0	4.82	000	0.00
12.42         0.23         1.29         15.22         5.02         7.93         3.68           2.91         0.00         24.38         2.97         0.12         1.88         22.86           0.57         11.68         1.13         20.45         0.09         0.10         23.56           22.79         10.39         2.13         2.405         7.72         0.30         2.62           21.04         1.46         0.00         0.00         5.58         5.02         0.02           21.04         1.46         0.00         0.00         5.58         5.02         0.02           9.92         1.03         0.08         1.59         0.85         6.03         2.35           9.92         1.03         0.08         1.59         0.74         0.11         0.08           9.92         1.03         1.07         3.208         6.03         2.35         2.40           9.08         8.49         1.97         3.94         0.71         0.08         5.75           46.62         0.13         2.26         2.19         0.72         1.39         5.75           16.18         0.01         0.00         2.13         0.00	32	16.74	0.86	1.40	6,23	0.01	1.11	1.65	1.16	14.39	96.0	3.75	0.91
2.91         0.00         24.38         2.97         0.01         22.86           0.57         11.68         11.24         0.92         0.09         0.10         23.55           22.79         10.39         2.13         24.05         7.72         0.30         2.62           21.04         1.03         2.14         20.45         2.28         0.41         1.13         28.45           21.04         1.46         0.00         0.00         0.58         5.02         0.24           9.92         1.03         0.08         0.46         32.08         6.01         5.40           30.89         8.49         1.90         0.46         32.08         6.51         5.40           46.62         0.13         2.26         2.19         0.72         1.39         5.75           10.18         0.01         0.00         2.64         0.30         2.29         2.25           5.41         0.03         2.64         0.30         2.29         2.25           15.34         16.12         0.65         2.64         0.30         2.29         2.25           5.41         0.03         0.05         3.59         0.10         0.13	36	12.42	0.23	1.29	15.22	5.02	7.93	3.68	2.57	12.01	0.69	2.30	19.15
0.57         11.00         11.24         0.92         0.09         0.10         2.63.0           22.79         10.39         2.045         2.28         0.41         1.13         2.845           2.104         1.46         0.00         0.09         1.59         0.41         1.13         2.845           2.104         1.46         0.00         0.00         0.56         0.22         0.02         0.02           3.92         1.03         0.08         1.59         0.85         6.03         2.345         0.02           3.0.89         8.49         1.97         3.94         0.71         0.09         16.91           4.6.62         0.13         2.26         2.19         0.72         1.39         5.75           15.34         16.12         0.61         0.72         0.30         2.29         2.29           15.34         16.12         0.63         2.84         0.30         2.29         2.29           5.41         0.03         0.05         2.54         0.14         2.07         0.31           3.65         3.70         0.13         3.791         0.14         0.13         37.91	37	2.91	0.00	24.38	2.97	0.12	1.88	22.86	10.05	29.88	7.26	1.63	3.42
6.00         0.91         20.45         2.78         0.71         1.00         2.04           21.04         1.46         0.00         0.00         5.58         5.02         0.02           21.04         1.46         0.00         0.00         5.58         5.02         0.02           1.301         5.83         1.00         0.06         32.08         6.51         5.40           30.89         8.49         1.97         3.94         0.71         0.08         6.51         5.40           4.66         0.13         2.26         2.19         0.72         1.39         5.75           10.18         0.01         0.00         2.31         0.61         0.56         0.70           15.34         16.12         0.63         2.64         0.30         2.29         2.25           5.41         0.03         0.05         0.14         2.07         0.31         37.91           3.86         5.37         0.33         23.05         1.35         3.98         0.14	800	75.70	11.08	71.24	24.05	0.08	0.00	23.55	38.57	9.07	0.00	1.24	11.37
21.04         1.46         0.00         0.00         5.38         5.02         0.02           9.92         1.03         0.08         1.59         0.85         6.03         23.52           13.01         5.83         1.00         0.46         0.71         0.08         6.51         5.40           30.89         8.49         1.97         3.94         0.71         0.08         6.51         5.75           4.65         0.13         2.26         2.19         0.72         1.39         5.75           10.18         0.01         0.00         2.31         0.65         0.70         0.56         0.70           15.34         16.12         0.63         2.64         0.30         2.29         0.25         0.75           15.34         16.12         0.63         2.64         0.30         2.29         0.25         0.70           5.41         0.03         0.05         0.14         2.07         0.31         37.91           0.46         0.03         0.33         23.05         1.35         3.98         0.14	40	6.00	160	20.45	2.28	0.41	1.3	28.45	8 23	25.26	5.26	1.66	26.73
9 92         1 03         0.08         1.59         0.85         6.03         23.52           13.01         5.83         1.00         0.46         32.08         6.51         5.40           30.89         8.49         1.97         3.46         0.71         0.08         16.51           46.62         0.13         2.26         2.19         0.72         1.39         5.75           10.18         0.01         0.00         2.29         2.54         0.30         2.29         2.75           15.34         16.72         0.63         2.64         0.30         2.29         2.25           5.41         0.03         0.05         0.54         0.14         2.07         0.31           36.65         3.70         0.62         3.59         0.10         0.13         37.91           0.46         0.03         0.33         23.05         1.35         3.98         0.14	41	21.04	1.46	0.00	0.00	5.58	5.02	0.02	7.42	7.25	23.20	1.36	6.78
13.01         5.83         1.00         0.46         32.08         6.51         5.40           46.62         0.13         2.84         0.71         0.08         16.51           46.62         0.13         2.84         0.77         0.08         5.75           10.18         0.01         0.00         2.31         0.61         0.56         0.70           15.34         16.12         0.63         2.64         0.30         2.29         2.25           5.41         0.03         0.05         0.05         0.14         2.07         0.31           38.65         3.70         0.63         23.05         0.10         0.13         37.91           0.46         0.03         0.33         23.05         1.35         3.98         0.14	42	9.92	1.03	0.08	1.59	0.85	6.03	23.52	11.47	7.21	39.26	0.42	13.00
46.22         0.13         2.84         0.71         0.06         16.91           46.22         0.13         2.84         0.72         1.39         5.75           10.18         0.01         0.00         2.31         0.61         0.56         0.70           15.34         16.12         0.63         2.64         0.30         2.29         2.25           5.41         0.03         0.05         0.54         0.14         2.07         0.31           3.86.55         3.70         0.63         2.30         0.10         0.13         37.91           0.46         0.03         0.33         23.05         1.35         3.98         0.14	43	13.01	5.83	1.00	0.46	32.08	6.51	5.40	0,33	1.35	49.15	5.78	1.73
10.18         0.01         0.00         2.13         0.01         0.05         0.70           16.34         16.12         0.63         2.64         0.30         2.29         2.26           5.41         0.03         0.05         0.54         0.14         2.07         0.31           3.86.55         3.70         0.63         2.30         0.10         0.13         37.91           0.46         0.03         0.33         23.05         1.35         3.98         0.14	45	30.09	0.49	1.9/	3.94	0.71	1 30	10.9	0.90	7.0	1.30	1.59	5.85
15.34         16.12         0.63         2.64         0.30         2.29         2.25           5.41         0.03         0.05         0.54         0.14         2.07         0.31           3.86.5         3.70         0.62         3.59         0.10         0.13         37.91           0.46         0.03         0.33         23.05         1.35         3.98         0.14	46	10.18	0.01	0.00	2.31	0.61	0.56	0.70	4.87	3.79	26.26	0.78	8.56
541         0.03         0.05         0.54         0.14         2.07         0.31           3865         3.70         0.62         3.59         0.10         0.13         37.91           0.46         0.03         0.33         23.05         1.35         3.98         0.14	47	15.34	16.12	0.63	2.64	0.30	2.29	2.25	0.25	4.28	22.52	5.29	2.57
38.65 3.70 0.62 3.59 0.10 0.13 37.91 0.46 0.03 0.33 23.05 1.35 3.98 0.14	48	5.41	0.03	0.05	0.54	0.14	2.07	0.31	20.49	11.86	21.51	30.29	4.33
5.44 0.55 5.50 0.54 0.54 0.54 0.54 0.54	249	38.65	3.70	0.62	3.59	0.10	3.08	37.91	28.54	42.70	0.58	5.98	3,63
0.79 1.76 3.03 0.83 3.14 1.184	Median/slide	4 12	92.0	1 76	3 03	283	3.44	11 84	4.33	6.20	202	1 54	26.23
1.04	Median/animal	41.	¥ 43	2	3	**	7.14	5	***	20.0	3.0	2	3
						4.43			٥.07			4.21	

Animal N°	1 65	6535			6537			6538	
Slide No. BC-07-	236 A	236 B	236 C	237 A	237 B	237 C	238 A	238 B	238 C
Code BC-07-14	J1	72	J3		F2			3	- 1
File No. BC-07-14	J1.xds	J2.xls	J3.xls	F1.xls	F2.xls	F3.xls	C1.xls	C2.xls	C3.xls
No. of cell		OliveTailMoment			ive lailMome		- 1	live I ailMome	
-	30.86	24.38	11.82	40.61	2.98	28.96	0.00	20.14	33.5
7	23.00	9.27	3.0	40.00	1 50	0.20	30.73	0.05	ر. در و
20	23.86	0.30	0.93	13.35	13.41	0.71	14.15	145	200
<b>,</b>	46 12	11.69	18 42	21.14	22.49	37.53	20.09	37.22	11.8
9	4.33	9.46	18.33	2.77	2.91	43.50	4.32	5.78	5.4
	35,11	2.37	3.80	13.25	3.50	16.59	36.56	6.90	25.3
80	37.14	0.13	20.54	17.05	14.67	6.40	23.63	1.25	0.0
<b>Б</b>	5.46	23.53	24.01	16.25	31.22	14.39	19.31	25.62	ار ان
9	10.33	23.35	2.32	3.53	39.37	4.36	4.58	0.33	δ. 0.
	8.82	12.29	28.0	0.91	13.09	14.02	2.10	240	22 8
10	20.75	9.43	15.01	0.58	6.47	12.81	9 9	707	0.42
5 2	305	0.30	46.35	10 12	6.21	0.34	175	15.09	2.4
<u> </u>	000	37.77	10.06	33.64	3.68	3.24	20.30	24.53	9
16	42.78	10.70	16.13	24.37	2.81	38.30	5.07	2.04	6.9
17	28.14	4.87	14.69	46.75	2.91	33.20	3.80	3.51	43.0
18	5.58	1.82	2.09	11,75	2.14	1.30	11.55	4.13	9.3
19	18.56	0.85	12.19	7.34	22.23	1.91	3.21	0.29	13
50	47.75	6.35	3.83	21.90	4.67	0.45	2.86	3.29	28.0
12	46.82	50.17	35.62	10.89	3.31	10.37	3.92	27.7	200
27	0.13	3.04	1 70	12 07	66.02	51.48	5.30 6.14	137	147
27	1.43	37.65	5.49	4 97	5.43	2.73	13.69	2 96	28.0
25	3.89	23.13	7.55	25.64	48.94	45.53	12.70	18.90	4.6
78	2.02	31.60	25.24	24.53	0.28	22.79	5.36	1.96	6.6
27	49.05	90.9	49.44	12.81	0.53	13.14	27.83	0.41	23.7
28	15.25	28.11	18.78	23.81	4.90	0.63	6.73	2.66	28.9
29	8.90	6.87	2.43	40.35	11.03	29.83	27.95	10.32	9.5
90	6.17	29.33	90.	5.24	0.92	28.59	2.62	1.50	Ö.
31	20.00	42.08	50.7	0.08	97.	0.40	6 73	40.72	25.0
33	20.40	55 13	35.90	11 35	3.40	80.0	15.20	13.26	11.6
35	11.65	4.66	29.27	100	0.55	5.77	00.0	1 99	17.3
32	9.28	32.80	19.20	4.05	14.98	40.43	14.03	0.56	40.7
36	29.97	23.31	18.90	1.09	35.26	1.16	5.79	26.32	49.0
37	1.00	5.20	10.58	2.80	30.74	0.83	8.28	4.02	37.2
88	35.54	6.64	7.96	19.58	9.00	25.93 1 Fe	8.34	70.7	200
88	19.33	14 94	80	183	0.00	6.23	18.76	0.73	30.05
41	0.97	4.37	1.98	7.35	7.44	8,50	3.04	9.83	31.3
42	21.63	33.98	23.09	22.45	44.70	13.35	15.34	12.85	0.2
43	6.23	12.40	15.15	26.55	1.66	21.10	7.91	8.11	0.9
44	8.88	5.59	6.11	28.03	36.01	0.01	4.38	14.88	35.2
\$ a	29.17	29.00	13.40	15.56	2.62	26.81	26.00	47.68	28.15
47	4.33	4.01	12.26	13.72	12.96	7.85	1.94	7.20	20.0
48	1.19	103	6.43	14.80	36.47	3.48	5,34	7.96	2.5
49	1.39	8.57	33.52	47.05	10.59	7.33	1.17	0.23	1.5
20	1.72	8.39	11.93	6.41	14.17	1.90	28.68	40.59	23.32
Median/stide	000	9.22	11.20	15.18	6.95	8.70	7.32	4 48	3.2
					K		4		2

FSR-IPL 070402 / CATECHOL / RHODIA Appendix No. 11: Individual values for Tail length / DUODENUM

Dose.	0 mg/kg/day (x2)	(YY)										
Animal N°		6512						6511			6515	
Slide No. BC-07-	232 A	232 B	232 C	233 A	233 B	233 C	234 A	234 B	234 C	235 A	235 B	235 C
Code BC-07-14	Q1	<b>Q</b> 2	<b>0</b> 3	K1	K	K3	D1	D2	D3	9	02	ဝဒ
File No. BC-07-14	Q1.xls	Q2.xls	Q3.xls	K1.xls	K2.xls	K3.xls	D1.xls	D2.xls	D3.xls	O1.xls	O2.xls	O3.xls
No. of cell		Tail length			Tail length			Tail length			Tail length	
-	23.27	104.35	78.08	67.57	60.06	99.10	93.84	99.10	89.34	24.77	15.01	60'96
7	83.33	93.84	42.04	41.29	22.52	45.79	99.85	110.36	42.04	68.32	45.04	13.51
70	25.31	15.01	13.51	30.79	29.31	87.09	104.35	135.90	14.26	23.27	47.30	96.09
t v:	78.08	24.02	87.84	73.57	36.04	107.36	93.09	8183	85.58	42.04	32.20	15.57
9	78.08	21.77	72.82	23.27	51.05	67.57	78.83	90.09	12.76	78.83	96.09	13.51
7	90.84	39.79	42.79	90.09	33.78	39.79	96.09	8.26	39.79	10.51	24.77	71.32
8	39.04	21.77	20.27	30.03	82.58	84.83	97.60	27.78	30.03	24.77	51.80	90.09
6	23.27	98.35	38.29	78.83	81.83	22.52	87.09	82.58	39.79	44.29	95.34	15.01
10	23.27	72.82	16.52	86.33	40.54	20.69	51.05	70.57	132.88	90.99	26.28	47.30
=	95.34	47.30	50.30	29.28	30.03	86.33	38.29	52.55	30.78	23.27	36.04	20.27
12	35.28	17.27	33.03	27.03	95.34	25.53	99.85	100.60	63.81	15.01	12.01	15.77
2 2	27.03	24.80	27.03	02.135	42.04	82.58	94.59	9,76	27.78	28.53	54.80	35.28
<u> </u>	27.03	33.78	48.05	60.07	R6 33	22.70	97.50	10.50	12.00	00.82 55.55	77.77	70.67
9	35.28	83.33	72.07	23.27	90.99	96.85	130 63	84.08	18.77	15.03	20.07	60.97
17	12.76	98,35	14.26	53.30	102.10	16.52	12.01	12.76	41.29	18.77	46.55	12.76
18	23.27	108.86	42.79	10.51	54.80	25.53	56.31	47.30	118.62	69.82	69.07	11.26
19	46.55	57.06	27.03	67.57	13.51	37.54	65.31	24.77	95.34	35.28	60.96	90.84
50	25.53	103.60	96.06	10.51	96.09	40.54	119.37	44.29	77.33	12.76	22.52	35.28
17	11.25	98.33	14.26	42.04	34.53	65.31	51.80	93.84	107.36	62.31	15.77	67.57
2382	42.79	17.27	42.04	12.03	30.03	76.58	95.04 46.55	6.01	30.29	12.03	51.80	1201
24	76.58	17.27	28.53	63.06	89.34	78.83	138.89	32.28	64.56	85.58	116.36	84 08
25	55.55	23.27	50.30	16.52	82.58	86.33	84.83	41.29	69.07	30.03	27.78	71.32
26	59.31	26.28	14.26	13.51	63.81	24.02	103.60	24.02	35.28	54.05	51.05	14.26
27	14.26	87.09	26.28	17.27	44.29	87.84	98.35	33.78	81.83	37.54	33.03	15.01
97	10.52	30.78	33.73	75.07	63.00	35.28	20.27	27.78	12.76	69.07	13.51	37.54
67	21.02	40.55	50.20	13.07	28.53	23.27 54 BO	111.80	12.70	72.82	12.01	48.05	34.53
33	31.53	124.62	28.53	12.01	57.06	18.02	138 89	24.77	63.81	60.33	102 10	47.30
32	42.79	110.36	19.52	21.02	110.36	87.84	13.51	42.79	71.32	40.54	9.76	16.52
33	102.10	78.83	15.01	90.99	45.79	107.36	99.10	51.05	100.60	80.33	48.80	61.56
85	101.35	27.03	15.77	79.58	61.56	24.02	90.84	65.31	32.28	10.51	18.77	30.78
35	87.09	16.52	118.62	27.03	112.61	15.01	60.81	39.04	50.30	18.02	105.10	31.53
37	14.70	00.70	14.20	12.51	108.11	20.02	90.85	20.20	20.72	18.02	96.06	33.78
38	79.58	63.08	33.78	27.78	101.35	21.02	51.05	55.34	90.32	34.53	13.77	20.04
36	63.81	109.61	113.36	14.26	115.61	94.59	120.87	31.53	103.60	24.77	26.78	88.59
40	25.53	45.79	39.79	54.80	36.04	28.53	50.30	12.76	89.34	61.56	38.29	77.33
41	72.82	66.82	69.82	83.33	65.31	13.51	29.28	43.54	97.60	12.01	31.53	57.81
42	78.08	107.36	123.87	12.76	14.26	48.05	45.04	38.29	94.59	15.01	28.53	14.26
5 2	88.59	17.27	68.32	13.51	53.30	42.04	51.05	96.85	65.31	12.76	11.26	87.84
45	39.79	12.01	15.04	12.03	60.81	55.55	80.08	40 54	97.60	10.51	12.0	75.87
46	15.01	99.10	120.12	15.01	27.03	59.31	73.57	9.76	22.52	24.02	26.28	66.06
47	15.01	60.81	18.02	21.02	82.58	29.28	11.26	14.26	63.81	18.02	21.02	57.81
848	27.78	23.27	75.07	62.31	92.34	117.87	70.57	54.05	78.08	65.31	12.76	61.56
96	23.27	33.28	93.00	37.54	72.83	43.54 81.83	38.34	25.53	80.33	89.34	60.06	18.02
Mean/elide	R S		N N	13.61	64.63	20.63		66.00		25.05	8	46.34
Meanfanimal		50.74			53.06	25.0	27.7	***	75.37	40.44	44.20	40.0
								62.03			43.27	

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Column   C	l est item: Dose	400 ma/ka/a	(CV) Ve										
The color of the	٥		6518			6517		1	6520		L	6519	
H	•	239 A	239 B	239 C	240 A	240 B	240 C	241 A	2418	241 C	242 A	242 B	242 C
4         H. A.A.         Infliction         Inches         Mile of the control of		Ŧ	H2	H3	Σ	M2	M3	S1	S2	S3	Z	N2	N3
1,1,2,	· 🛰	H1.xls	H2.xls	H3.xls	M1.xls	M2.xfs	M3.xls	S1.xls	S2.xls	S3.xls	N1.xls	N2.xls	N3.xls
1,1,			Tail length			Tail length			Tail length			Tail length	
Column   C	L	17.27	68.32	29.28	29.28	75.82	63.81	97.60	44.29	100.60	99.10	21.77	18.02
1989   1985		122.37	70.57	27.03	111.11	70.57	93.09	16.52	57.81	12.76	137.38	63.81	62.31
45.55         10.05 <th< td=""><td></td><td>93.84</td><td>28.53</td><td>74.32</td><td>99.10</td><td>47.30</td><td>62.31</td><td>90.09</td><td>12.76</td><td>57.06</td><td>39.04</td><td>58.56</td><td>93.84</td></th<>		93.84	28.53	74.32	99.10	47.30	62.31	90.09	12.76	57.06	39.04	58.56	93.84
Columb   C		96.85	107.36	19.52	72.07	92.34	24.77	53.30	75.07	41.29	84.08	24.02	31.53
March   Marc		25.53	85.58	26.28	65.31	70.57	55.55	103.60	67.57	72.07	154.65	74.32	76.58
1,2,5,5,5,5,5,5,5,5,5,5,5,5,5,5,5,5,5,5,		54.80	99.85	83.33	57.81	109.61	58.56	126.12	136.63	8.26	64.56	90.99	28.53
March   Marc		80.33	28.53	57.06	78.83	30.03	96.09	27.78	18.77	14.26	170.42	18.02	77.33
1,0,5,0,5,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,		14.26	102.85	16.52	58.56	45.04	90.09	35.28	17.27	103.60	107.36	37.54	14.26
1975   1975		103.60	25.53	24.02	39.04	31.53	117.87	114.86	100.60	26.28	38.29	43.54	41.29
1,2,0,1, 1,2,6,2   1,2,6,3   1,2,6,4   1,2,6,6   1,2,6,4   1,2,6,6   1,2,6,7   1,2,6,6   1,2,6,7   1,2,6		89.34	132.13	111.86	84.83	98.35	24.02	97.60	169.67	70.57	49.55	36.04	57.81
12.0   12.0		10.51	18.77	13.51	15.01	106.60	60.06	18.77	103.60	79.58	91.59	65.31	28.53
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,		50.30	12.76	12.76	11.26	108.86	27.78	55.55	87.84	21.77	132.13	92.34	56.31
March   Marc		12.01	15.01	26.28	76.58	15.01	53.30	44.29	12.01	23.27	69.82	55.55	66.82
70.27         20.27         21.00 <th< td=""><td></td><td>40.54</td><td>53.30</td><td>11.26</td><td>93.09</td><td>87.84</td><td>75.07</td><td>40.54</td><td>36.04</td><td>12.76</td><td>97.60</td><td>18.77</td><td>90.99</td></th<>		40.54	53.30	11.26	93.09	87.84	75.07	40.54	36.04	12.76	97.60	18.77	90.99
6.6         7.44         7.45         4.20         4.25         7.45		20.27	95.34	32.28	31.53	33.03	113.36	42.79	25.53	12.01	27.03	54.80	39.04
26.267         17.76         17.77         17.76         17.77         17.76         17.76         17.77         17.76         17.76         17.77         17.76         17.76         17.77         17.77         17.76         17.76         17.76 <t< td=""><td></td><td>37.54</td><td>24.02</td><td>67.57</td><td>45.04</td><td>82.58</td><td>47.30</td><td>38.29</td><td>114.11</td><td>80.33</td><td>25.53</td><td>74.32</td><td>48.05</td></t<>		37.54	24.02	67.57	45.04	82.58	47.30	38.29	114.11	80.33	25.53	74.32	48.05
2.9.28         17.754         3.833         9.831         18.708         80.00         17.30         17.204         17.004		69.07	101.35	57.06	14.26	40.54	118.62	37.54	12.76	21.02	136.63	76.58	36.04
32.28         33.03         7.207         7.88.3         110.886         66.32         10.06         66.31         7.63         16.88.9           12.76         1.24.62         1.126         33.03         7.33         7.35         7.35         7.37         10.06         10.06         10.36         27.78         66.37         17.39         16.07         105.10         25.23         10.06		29.28	127.63	83.33	26.31	8/.09	30.03	63.06	103.60	12.01	120.87	60.81	22.52
10.30         17.30         17.30         73.40         33.60         44.29         33.60         44.29         33.60         44.29         33.60         44.29         44.29         33.70         44.29         44.29         44.29         44.29         44.29         44.29 <th< td=""><td></td><td>32.28</td><td>33.03</td><td>72.07</td><td>78.83</td><td>108.86</td><td>68.32</td><td>90.00</td><td>93.09</td><td>39.79</td><td>90.09</td><td>61.56</td><td>47.30</td></th<>		32.28	33.03	72.07	78.83	108.86	68.32	90.00	93.09	39.79	90.09	61.56	47.30
1,000   1,00		50.30	13.51	51.05	33.03	33.03	30.03	110.36	27.78	65.31	77.33	138.89	30.03
24.77         10.25         24.77         51.50         12.01         64.06         15.01         67.03         13.78         47.30 <th< td=""><td></td><td>12.70</td><td>24.02</td><td>20.70</td><td>79.67</td><td>7.55</td><td>75.57</td><td>30.03</td><td>04.00</td><td>102.07</td><td>77.67</td><td>72.07</td><td>43.04</td></th<>		12.70	24.02	20.70	79.67	7.55	75.57	30.03	04.00	102.07	77.67	72.07	43.04
75.07         36.79         26.26         59.31         33.78         80.33         27.78         18.02         17.76         17.67 <th< td=""><td></td><td>24 77</td><td>102.85</td><td>24.77</td><td>31.53</td><td>12.02</td><td>84.08</td><td>15.70</td><td>87.09</td><td>23.78</td><td>23.73</td><td>47.30</td><td>83.84</td></th<>		24 77	102.85	24.77	31.53	12.02	84.08	15.70	87.09	23.78	23.73	47.30	83.84
75.07         19.52         19.02         21.02         19.94         93.84         44.29         33.73         70.57         55.30         66.07           34.53         20.10         13.04         10.585         18.25         20.27         14.29         16.50         73.78           34.53         20.10         14.28         12.78         20.27         16.20         16.28         16.29         14.429         16.50         73.78           80.36         11.26         16.20         16.22         12.01         14.28         20.28         16.20         13.78         48.59           80.33         11.26         16.20         14.28         16.26         20.28         12.76         11.89         11.87         11.80		75.07	36.79	26.28	59.31	33.78	80.33	27.78	18 02	12.76	127.63	35.28	22.52
9.01         6.3.06         6.3.3         3.9.04         140.6.85         96.33         26.28         26.28         44.29         64.29         64.56         75.57           65.06         12.76         63.06         63.26         32.24         14.26         12.76         16.07         16.07         16.08         44.29           65.06         12.76         63.06         32.24         26.34         26.53         20.27         11.36         46.55           76.37         86.34         66.06         76.88         20.27         11.36         46.55           76.07         11.26         17.27         33.08         66.06         76.88         20.27         11.35         77.07           48.06         66.07         11.43         20.03         142.49         12.76         11.27         31.53         76.77           48.06         11.26         11.26         11.26         11.27         30.00         11.27         30.78         14.29         12.76         11.27         30.78         14.29         12.76         11.27         30.78         14.29         12.76         11.27         30.78         14.29         12.76         11.27         11.17         11.27         11.27		75.07	19.52	18.02	21.02	139.64	93.84	44.29	33.03	70.57	53.30	69.07	78.83
34.53         21.02         16.52         16.52         12.01         14.26         12.76         20.27         16.01         33.78         77.883           60.36         12.76         65.06         17.27         32.28         92.34         26.58         91.59         20.27         113.36         44.29           80.36         11.276         17.27         33.08         46.56         16.52         26.38         20.28         20.27         113.36         44.29           81.08         26.907         46.55         14.26         26.28         12.76         10.35         18.77           81.08         26.907         46.55         14.26         26.28         12.76         10.35         18.77           81.08         11.26         90.07         14.26         27.78         14.26         26.28         12.76         10.35         30.78         10.07         10.35         30.78         10.07         10.35         30.78         10.07         10.35         30.78         10.07         10.35         30.78         10.07         10.35         30.78         10.07         10.35         30.78         10.07         10.35         30.78         30.07         30.07         30.07         30.07		9.01	63.06	83.33	39.04	105.85	86.33	26.28	29.28	44.29	61.56	73.57	64.56
63.06         12.76         63.06         32.28         99.34         26.28         26.58         20.78         18.02         109.86         44.29           93.33         11.26         16.36         33.08         59.31         76.56         20.27         113.36         46.55           37.54         60.34         60.81         30.78         16.55         27.78         10.35         12.76         10.35         27.08           49.56         69.07         14.26         27.78         120.12         14.26         12.76         10.35         27.08           7.80         11.26         90.09         16.52         99.86         14.26         7.30         81.73         10.35         7.07           65.30         11.261         18.00         16.52         99.86         14.26         7.43         10.78         12.07         10.35         7.00         10.36         10.35         7.00         10.36         10.36         10.36         10.36         10.37         10.37         10.37         10.37         10.37         10.37         10.37         10.37         10.37         10.37         10.37         10.37         10.37         10.37         10.37         10.37         10.37 <t< td=""><td></td><td>34.53</td><td>21.02</td><td>16.52</td><td>16.52</td><td>12.01</td><td>14.26</td><td>12.76</td><td>20.27</td><td>15.01</td><td>33.78</td><td>78.83</td><td>18.77</td></t<>		34.53	21.02	16.52	16.52	12.01	14.26	12.76	20.27	15.01	33.78	78.83	18.77
80.33         11.26         17.27         33.03         59.31         49.55         25.53         59.28         20.27         11.348         46.55           81.08         23.4         60.17         31.63         30.03         162.16         44.29         12.76         11.34         46.55           81.08         26.28         47.30         81.83         10.43         30.03         162.16         44.29         12.76         10.13         18.77           78.08         11.26         90.09         16.52         30.03         14.26         26.28         30.78         12.76         10.13         30.78           50.30         112.61         18.02         35.28         36.04         14.264         74.32         66.88         30.78         75.07         10.13         30.78         75.07         46.56         83.29         76.03		63.06	12.76	63.06	32.28	92.34	26.28	91.59	30.78	18.02	108.86	44.29	74.32
37.54         89.34         60.81         30.78         66.06         76.58         18.02         59.31         31.53         27.03           81.08         26.28         47.30         81.08         70.73         40.56         11.26         27.03         18.02         12.76         14.27         14.28         14.		80.33	11.26	17.27	33.03	59.31	49.55	25.53	29.28	20,27	113.36	46.55	38.29
81.08         26.28         47.30         48.63         30.03         162.16         44.29         12.76         10.35         18.77           78.08         11.26         90.09         16.25         27.03         16.21         42.26         12.76         10.35         18.77           78.08         11.26         90.09         16.52         99.65         54.80         30.78         26.28         12.76         10.35         75.07           78.08         11.26         13.02         35.28         36.04         14.26         42.86         15.01         47.30         60.81         38.29           62.31         56.28         11.26         14.26         14.26         14.26         66.81         38.29         75.07           57.31         69.07         11.27         101.35         79.58         26.28         72.07         81.08         49.55         21.77           55.55         78.32         78.33         26.33         11.41         12.53         26.22         27.78         38.04         37.54         12.77         11.83         37.54         12.77         11.25         27.78         26.55         11.42         47.54         12.37         11.27         11.27 <t< td=""><td></td><td>37.54</td><td>89.34</td><td>60.81</td><td>30.78</td><td>90.99</td><td>76.58</td><td>18.02</td><td>59.31</td><td>33.78</td><td>31.53</td><td>27.03</td><td>50.30</td></t<>		37.54	89.34	60.81	30.78	90.99	76.58	18.02	59.31	33.78	31.53	27.03	50.30
49.55         16.907         46.55         17.8         120.12         37.8         12.0.12         37.8         12.0.12         37.8         12.0.12         37.8         12.0.12         37.8         12.0.12         37.8         12.0.12         37.8         12.0.12         37.8         12.0.12         37.8         30.78         30.78         36.20         75.07         10.00         36.28         36.04         14.264         74.32         15.01         47.30         60.81         36.20         75.07         10.00         36.28         36.79         36.20         37.00         40.81         47.30         60.81         36.20         47.30         60.81         36.20         47.30         60.81         36.20         47.30         60.81         36.20         47.30         60.81         47.30         60.81         47.30         60.81         47.30         86.82         20.78         47.30         60.81         47.30         86.82         20.78         47.30         60.81         47.30         86.82         20.78         86.90         46.82         20.78         86.90         46.82         20.78         86.90         46.82         20.78         86.90         46.82         20.70         86.90         46.82         20.70		81.08	26.28	47.30	81.83	104.35	30.03	162.16	44.29	12.76	101.35	18.77	72.82
78.08         11.26         90.09         16.52         99.85         54.80         30.78         28.28         30.78         38.29         75.07           78.08         11.26         90.09         16.52         36.04         14.28         14.26         65.31         47.30         60.81         38.29         75.07           62.31         56.31         34.53         40.54         108.11         86.33         14.26         65.31         166.66         83.33         47.30           62.31         56.31         14.26         66.31         16.66         63.33         47.30         60.81         38.29         47.30           19.22         19.34         40.54         108.11         10.35         12.04         12.07         81.08         47.30         60.81         37.37           19.20         19.35         17.34         18.25         17.74         25.53         16.56         17.27         38.79         47.30           30.09         65.31         17.32         27.63         17.34         18.52         17.34         18.52         17.77         18.76         17.27         22.52           30.00         60.66         17.32         27.63         17.34         1		49.55	69.07	46.55	14.26	27.78	120.12	14.26	26.28	12.76	122.37	30.78	36.04
50.30         112.61         18.02         35.28         36.04         14.264         14.32         15.01         47.30         60.81         38.29           50.31         112.61         18.02         35.28         36.04         10.36         16.26         65.31         66.82         47.30         60.81         38.29           57.81         69.07         117.87         107.35         79.36         26.26         72.07         81.08         49.35         21.77           55.55         78.34         17.27         101.35         27.78         25.36         114.11         125.37         69.82           30.78         55.55         78.34         12.76         109.61         27.78         25.76         102.10         49.59         17.27         38.79           30.78         51.80         70.57         66.31         71.32         28.53         11.26         17.27         38.79         17.27         39.04         37.54         102.10         44.59         17.27         39.04         37.54         102.10         44.59         17.27         39.04         37.54         102.10         44.59         10.05         22.25         22.25         27.78         27.78         12.01         22.53<		78.08	11.26	90.09	16.52	99.85	54.80	30.78	26.28	30.78	38.29	75.07	26.28
62.31         56.31         34.53         40.54         108.11         86.33         14.26         66.51         16.66         83.33         47.30           67.81         69.34         71.87         10.35         79.58         26.28         72.77         81.08         49.52         24.73           19.52         69.34         77.8         22.53         61.56         71.32         26.52         26.53         61.66         80.07         22.52           93.09         55.56         78.83         12.76         36.79         36.79         37.54         10.35         17.81         26.52         26.52           93.09         57.80         70.57         109.61         77.78         27.53         10.35         17.77         50.30         27.27           93.00         66.31         71.32         28.53         11.93         36.04         37.54         18.02         16.06         17.27         50.30           60.06         66.34         71.32         27.78         77.78         12.01         22.52         17.77         51.05         23.27           80.06         66.66         10.21.0         27.24         27.78         30.78         30.03         10.135		20.30	112.61	18.02	35.28	36.04	142.64	74.32	15.01	47.30	60.81	38.29	91.59
57.81         69.07         117.87         17.27         10.35         74.58         26.28         17.20         81.08         49.55         21.77           19.55         78.08         12.76         32.28         65.31         10.36         11.32         69.07         22.52           55.56         78.65         78.65         10.56         71.32         69.07         22.52         22.52         22.52         27.34         12.76         10.210         94.59         17.27         69.07         22.52         22.52         17.84         10.210         94.59         17.27         38.79         22.52         22.52         17.84         10.210         94.59         17.27         38.79         22.52         22.52         17.84         17.27         38.79         22.52         22.52         17.82         12.01         12.01         12.98         21.77         51.05         50.06         60.06         22.52         22.52         17.82         12.01         12.01         12.85         30.03         60.06         22.53         16.06         13.51         10.86         27.03         22.52         27.83         10.04         33.03         10.13         27.81         30.03         60.06         27.03         27.	İ	62.31	56.31	34.53	40.54	108.11	86.33	14.26	65.31	166.66	83.33	47.30	77.33
19.52         69.34         78.06         5.51         36.78         10.435         11.25         68.82           65.56         18.27         36.78         96.37         36.78         10.435         11.41         12.53         68.82           93.09         63.06         75.66         18.77         109.61         37.54         12.76         102.10         94.59         17.27         39.79           93.09         63.06         70.56         18.77         109.61         37.54         12.76         102.10         94.59         17.27         39.79           50.06         66.82         23.26         77.32         22.85         12.01         25.53         85.86         30.03         60.30           60.06         66.82         23.26         77.78         12.01         25.53         85.86         30.03         60.30           60.06         66.82         27.78         30.78         12.01         25.53         85.86         30.03         80.03         80.03         80.03         80.03         80.03         80.03         80.03         80.03         80.03         80.03         80.03         80.03         80.03         80.03         80.03         80.03         80.03	Ì	57.81	69.07	117.87	17.27	101.35	79.58	26.28	72.07	81.08	49.55	21.77	40.54
55.55         78.83         12.76         35.53         61.56         71.32         69.07         22.52           93.09         55.55         12.60         12.76         12.75         10.21         45.59         17.27         39.79           93.08         51.80         70.57         65.31         71.32         28.53         112.77         37.54         18.02         50.30           93.08         51.80         70.57         25.52         17.27         27.03         17.27         30.79           60.06         65.10         71.32         27.78         30.78         17.51         51.65         23.27           60.06         66.06         76.70         12.01         22.53         85.66         60.06         23.27           60.06         66.37         71.32         27.78         30.78         85.66         57.81         30.03           60.06         66.37         71.32         27.78         30.78         85.56         57.81         30.03           63.81         46.26         10.21         25.83         85.86         30.03         10.135         57.81         20.78           10.18         10.18         10.18         12.10         12.01		19.52	89.34	/8.08	32.28	65.31	39.04	30.78	104.35	114.11	125.37	69.82	24.77
93.09         65.10         79.58         18.77         109.51         37.54         17.76         102.10         94.59         17.27         38.79           93.09         53.00         27.03         77.57         65.31         71.32         22.52         72.85         12.01         13.51         12.98         21.77         51.05         53.27           60.06         27.03         77.57         65.31         77.54         88.59         70.57         90.84         21.77         51.05         53.27           34.53         102.10         84.08         37.54         88.59         70.57         90.84         33.03         10.06         10.60 <td></td> <td>55.55</td> <td>78.83</td> <td>12.76</td> <td>36.79</td> <td>98.35</td> <td>27.78</td> <td>25.53</td> <td>61.56</td> <td>71.32</td> <td>69.07</td> <td>22.52</td> <td>38.29</td>		55.55	78.83	12.76	36.79	98.35	27.78	25.53	61.56	71.32	69.07	22.52	38.29
53.7.6         77.32         20.53         77.32         20.53         77.32         20.53         77.32         20.53         77.32         20.53         77.32         20.53         77.32         20.53         77.33 <t< td=""><td></td><td>93.09</td><td>03.00</td><td>70.57</td><td>18.//</td><td>108.01</td><td>37.54</td><td>12.70</td><td>102.10</td><td>84.59</td><td>17.71</td><td>39.79</td><td>14.26</td></t<>		93.09	03.00	70.57	18.//	108.01	37.54	12.70	102.10	84.59	17.71	39.79	14.26
53.30         6.51         7.1.32         7.1.32         7.1.32         7.1.32         7.1.32         7.1.31         1.2.31         7.1.38         21.71         31.03         60.06           60.06         66.381         66.381         66.381         66.382         71.32         27.73         10.57         28.58         85.58         30.03         60.06           63.81         66.82         70.67         90.84         33.03         101.35         57.81         30.03           13.67         106.80         37.54         88.59         70.57         90.84         33.03         101.35         57.81         30.03           25.53         13.67         10.66         12.01         23.27         82.34         53.03         22.52           26.28         36.76         11.26         12.01         23.27         82.34         53.30         12.52           26.28         143.54         46.84         45.54         15.01         80.09         15.01         88.59         48.25         15.77         18.83         10.33         12.61           46.04         35.28         36.38         48.59         48.59         15.77         18.83         10.35         59.31         12.61		30.70	01.00	77,00	00.5	70.07	20.03	19.37	40.65	57.75	70.07	50.30	32,28
34.50         102.10         84.08         37.54         88.59         70.57         90.84         33.03         102.10         57.81         30.03           63.81         169.82         102.10         84.08         37.54         88.59         70.57         90.84         33.03         10.06         13.51         108.86         27.03           13.61         166.00         14.29         99.10         70.57         18.02         10.66         13.51         108.86         27.03           25.53         36.79         140.29         77.33         61.56         61.56         12.01         23.27         92.34         53.30         22.52           26.28         43.54         38.29         16.56         71.32         66.82         30.78         83.33         15.01           99.0         15.01         88.59         48.05         15.77         78.83         10.135         56.31         28.53           16.52         36.04         35.28         90.09         15.01         88.59         48.05         15.77         78.83         10.135         56.31         28.53           16.52         36.04         35.28         48.45         48.27         61.78         83.33		23.30	66.82	70.78	74.32	27.78	30.78	15.01	129.88	77.17	00.00	73.57	77.17
63.81         69.82         106.60         41.29         99.10         79.88         18.02         160.66         13.51         108.86         27.03           25.53         124.62         52.55         61.56         173.87         33.03         11.26         133.63         18.77         36.78         29.28           25.53         43.54         140.39         17.33         61.56         61.56         12.01         23.27         92.34         53.30         22.52           26.53         43.54         145.49         93.84         43.54         15.01         60.06         15.01         66.82         30.78         83.33         15.01           45.04         35.28         90.09         15.01         88.59         48.06         15.77         78.83         10.35         59.31         28.53           16.7         59.91         51.40         46.85         72.70         61.76         48.27         61.34         74.28         49.46           54.32         54.32         54.32         52.60         52.60         56.86         56.86         56.86		34.53	102 10	84.08	37.54	88 50	70.70	90.84	33.03	101.35	57.81	30.00	120 88
13.51         124.62         55.55         61.56         123.87         33.03         11.26         133.63         18.77         36.79         29.28           25.53         39.79         140.39         77.33         61.56         61.56         61.56         12.01         22.27         32.74         53.30         22.52           26.53         39.79         140.39         77.33         61.56         61.56         12.01         23.27         32.34         53.30         22.52           99.10         12.01         38.29         16.52         71.35         68.82         15.01         60.06         15.01         55.55         54.80           45.04         35.28         90.09         15.01         38.59         48.59         15.77         78.83         101.35         59.31         28.53           51.67         59.91         51.40         46.85         72.70         61.76         48.27         12.76         58.33         68.59           54.32         54.32         50.09         15.77         78.83         10.35         58.33         68.59           54.32         56.86         57.70         61.76         48.27         74.28         49.46           54		63.81	69.82	106.60	41.29	99.10	79.58	18.02	160 66	13.51	108.86	27.03	14.26
25.53         39.79         140.39         77.33         61.56         61.56         61.56         12.01         23.27         92.34         53.30         22.52           26.28         43.54         30.78         38.33         30.78         33.33         15.01           99.10         35.28         44.29         93.84         43.54         15.01         60.06         15.01         85.55         54.80           45.04         35.28         90.09         15.01         88.59         48.05         15.77         78.83         101.35         59.31         28.53           16.52         56.91         57.7         78.83         101.35         83.33         88.59           48.41         51.67         48.27         61.76         48.27         17.76         88.33         88.59           54.32         54.32         60.43         61.76         48.27         52.60         56.86		13.51	124.62	52.55	61.56	123.87	33.03	11.26	133.63	18.77	36.79	29.28	21.77
26.28         43.54         38.29         16.52         71.32         66.82         30.78         83.33         30.78         83.33         15.01           99.10         12.01         33.78         44.29         93.84         43.54         15.01         60.06         15.01         55.55         54.80           45.04         35.28         90.09         15.01         88.59         48.05         16.77         78.83         11.26         12.76         58.33         88.59           16.7         35.28         96.09         70.57         35.28         96.09         14.28         49.46         83.33         88.59           51.67         59.91         51.40         46.85         72.70         61.76         48.27         61.13         48.41         74.28         49.46           54.32         54.32         56.86         52.60         56.86         56.86		25.53	39.79	140.39	77.33	61.56	61.56	12.01	23.27	92.34	53.30	22.52	77.33
9910         12.01         33.78         44.29         93.84         43.54         15.01         60.06         15.01         55.55         54.80           45.04         35.28         90.09         15.01         88.59         46.85         14.32         15.77         78.83         101.35         59.31         28.53           16.7         59.91         51.40         46.85         72.70         61.76         48.27         61.13         48.41         74.28         49.46           54.32         54.32         60.43         52.60         52.60         56.86         56.86		26.28	43.54	38.29	16.52	71.32	66.82	30.78	83.33	30.78	83,33	15.01	84.83
45.04         35.28         90.09         15.01         88.59         48.05         15.77         78.83         101.35         59.31         28.53           16.5         59.91         70.57         35.28         94.59         61.78         61.76         61.76         74.28         49.46           54.32         60.43         60.43         52.60         52.60         52.60         56.86		99.10	12.01	33.78	44.29	93.84	43.54	15.01	90 09	15.01	55.55	54.80	12.01
16.27 96.09 (0.5) 35.28 94.59 (4.32 135.88 11.26 12.76 83.33 88.59 85.91 51.67 59.91 46.85 72.70 61.76 48.27 61.13 48.41 74.28 49.46 56.86		45.04	35.28	90.09	15.01	88.59	48.05	15.77	78.83	101.35	59.31	28.53	51.80
51.67 53.32 51.40 49.63 61.48 49.45 52.60 49.42 56.86 56.86	ı	76.	80 95	ξ. (2)	35.78	200	****	38.05		***	83,33	88.59	74-74
70.75	L	21.6		01.40	46.83		٩/٠	48.4/	27.13	48.41	4.28	49.46	46.85
	_		24.32			24.00							

Column	Test item: Dose:	CATECHOL 200 mg/kg/day		Organ:	DUODENUM		1st treatment: 2nd treatment:		25/09/2007 26/09/2007				
7. A3 A 24 B A3 C 24 A A 24 B A3 C 24 A A 24 B A3 C 24 A A 24 B A3 C 24 A A 24 B A3 C 24 A A 24 B A3 C 24 A A A A A A A A A A A A A A A A A A	Animal N°					6521			6522			6525	
A   A   A   A   A   A   A   A   A   A	Slide No. BC-07-	243 A	243 B	243 C	244 A	244 B	244 C	245 A	245 B	245 C	246 A	246 B	- 1
A 145   A 245   A 24	Code BC-07-14	A1	A2	A3	<b>P</b> 1	P2	P3	ב	2	<u>L3</u>	Ш	E2	- 1
Table	File No. BC-07-14	A1.xls	A2.xls	A3.xls	P1.xds	P2.xls	P3.xls	L1.xls	L2.xfs	L3.xls	E1.xls	E2.xls	
45.04         15.77         25.55         17.22         68.32         68.34         98.35 <th< td=""><td>No of cell</td><td></td><td>Tail length</td><td></td><td></td><td>Tail length</td><td></td><td></td><td>Tail length</td><td></td><td></td><td>Tail lengt</td><td>_</td></th<>	No of cell		Tail length			Tail length			Tail length			Tail lengt	_
105-10 12-76 6231 15-61		45.04	15.77	52.55	71.32	68.32	85.58	09.76	78.83	84.83	80.33	13.51	
55.79         65.70 <th< td=""><td>2</td><td>105.10</td><td>12.76</td><td>62.31</td><td>15.01</td><td>27.03</td><td>53.30</td><td>98.35</td><td>80.33</td><td>66.06</td><td>99.10</td><td>15.//</td><td>- 1</td></th<>	2	105.10	12.76	62.31	15.01	27.03	53.30	98.35	80.33	66.06	99.10	15.//	- 1
55.26         65.27         7.12         7.25         1.05         <	m	72.07	28.26	35.28	130.63	30.78	90.00	05.50	54.90	100,00	24.62	22.62	
1,10,39	4	35.28	40.04	28 70	32 28	41.20	34 53	108 86	63.69	60.08	13.51	86.33	
1,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0	ဂ «	57.84	26.32	48.05	92.20	57.81	72.83	14.26	77.33	69.82	34.53	75.07	
7.5.7.         2.5.2.         2.6.9.2         113.6         38.2         16.6.3         15.0.1         34.5.3         15.0.1         34.7.3         15.0.1         34.7.3         15.0.1         34.7.3         15.0.1         34.7.3 <td>0 ~</td> <td>110.36</td> <td>18.02</td> <td>24.77</td> <td>111.86</td> <td>13.51</td> <td>21.77</td> <td>87.84</td> <td>85.58</td> <td>60.81</td> <td>17.27</td> <td>58,56</td> <td></td>	0 ~	110.36	18.02	24.77	111.86	13.51	21.77	87.84	85.58	60.81	17.27	58,56	
7.85         7.75         7.86         7.05         7.87         7.87         7.86         4.06 <th< td=""><td>- 00</td><td>73.57</td><td>23.27</td><td>29.28</td><td>112.61</td><td>38.29</td><td>68.32</td><td>65.31</td><td>33.03</td><td>12.01</td><td>34 53</td><td>63.81</td><td></td></th<>	- 00	73.57	23.27	29.28	112.61	38.29	68.32	65.31	33.03	12.01	34 53	63.81	
47.30         78.70 <th< td=""><td>ග</td><td>28.53</td><td>47.30</td><td>29.28</td><td>113.36</td><td>75.82</td><td>12.78</td><td>78.08</td><td>13.51</td><td>55.55</td><td>48.05</td><td>42.04</td><td></td></th<>	ග	28.53	47.30	29.28	113.36	75.82	12.78	78.08	13.51	55.55	48.05	42.04	
7.507         2.85.3         2.027         1.18.36         1.02.10         0.00	10	47.30	57.06	42.04	27.03	35.28	70.57	18.77	72.82	26.28	36.79	54.05	- 1
17.00   17.0	11	75.07	28.53	20.27	116.36	102.10	90.09	105.10	34.53	74.32	17.27	29.78	- 1
47 / 9         26.53         68.64         26.53         68.64         26.53         68.64         26.53         66.64         26.53         66.64         26.53         66.64         26.53         66.64         26.53         66.64         26.53         66.64         26.53         66.64         26.53         66.64 <t< td=""><td>12</td><td>47.30</td><td>26.28</td><td>60.81</td><td>23.27</td><td>132.88</td><td>32.28</td><td>70.07</td><td>40.04</td><td>00.00</td><td>17.7</td><td>24.03</td><td>J</td></t<>	12	47.30	26.28	60.81	23.27	132.88	32.28	70.07	40.04	00.00	17.7	24.03	J
9.0.00         2.1.7.7         14.26         95.54.0         2.1.0.7         16.52         16.25	133	42.79	28.53	24.80	122.37	20.02	00.00	158 15	20.00	20.04	12.03	14.02	
80.04         61.25         69.25         7.1.35         69.25         7.1.35         69.25         7.1.35         69.25         7.1.35         69.25         7.1.35         69.25         7.1.35         69.25         7.1.35         69.25         7.1.35         69.25         7.1.35         69.05         4.1.35         69.05         4.1.35         4.0.55         69.05	4 4	00.00	20.20	98.00	33.10	24 03	10.55	107.36	33.03	21.03	20.28	23.78	-
(5.5)         (5.5)         (5.6)         (4.75)         (4.55) <td>10</td> <td>90.00</td> <td>01 00</td> <td>12 51</td> <td>05.24</td> <td>41.20</td> <td>80.82</td> <td>70.67</td> <td>56.33</td> <td>40.55</td> <td>24.77</td> <td>0.5</td> <td>1</td>	10	90.00	01 00	12 51	05.24	41.20	80.82	70.67	56.33	40.55	24.77	0.5	1
46.54         39.79         60.61         27.03         39.79         46.05         46.05         46.05         46.05         46.05         46.75         46.95         46.77         46.75 <th< td=""><td>10</td><td>12.64</td><td>01.03</td><td>70.67</td><td>68 32</td><td>54.05</td><td>13.51</td><td>60.07</td><td>47.30</td><td>86.06</td><td>36.04</td><td>58.56</td><td>1</td></th<>	10	12.64	01.03	70.67	68 32	54.05	13.51	60.07	47.30	86.06	36.04	58.56	1
29.26         45.79         20.27         45.04         25.27         57.06         17.07         10.67         95.09         46.55         41.39           72.82         45.76         20.27         17.06         17.31         17.03         15.00         21.00           72.82         22.47         24.02         15.07         15.07         15.07         15.07         15.00           72.83         22.47         24.02         15.07         15.07         15.00         22.07         15.00         22.07         15.00         22.07         15.00         22.07         15.00         22.07         15.00         22.07         15.00         15.00         15.00         15.00         15.00         15.00         22.07         15.00	70	10.01	20,05	80.97	37.02	30.70	41.29	48.05	46.55	45.79	48.80	40.54	
51.05         34.53         46.90         74.32         57.06         13.51         102.10         72.07         55.10         55.10           45.26         24.77         24.77         15.00         15.01         56.31         56.36         24.77         57.00         45	10	20.04	45.79	20.02	45.04	23.07	57.06	105.10	60.06	46.55	41.29	81.08	1
47.232         93.84         24.77         24.02         15.01         65.31         13.85         68.56         38.04         22.52           66.87         24.77         11.26         17.57         14.57         14.50         66.51         58.56         38.04         22.52           66.87         28.73         14.56         27.57         14.26         17.57         14.26         17.57         14.50         17.51         28.30         36.70         46.04           66.87         28.53         14.59         16.53         65.56         29.28         14.39         66.56         15.00         46.04           7.28.7         17.28         27.03         44.39         57.06         66.06         15.00         46.04	200	51.05	34 53	48.80	74.32	57.06	13.51	102.10	72.07	51.80	51.05	12.76	1
4579         2477         11.26         6757         1351         9309         6531         68.65         27.03         45.04           68.2         45.76         44.55         27.03         34.53         27.03         34.53         16.04           33.78         40.54         17.03         44.29         25.53         45.79         44.00           33.78         40.54         17.03         44.29         25.53         45.79         48.05         15.01           66.31         48.16         17.06         66.82         17.03         20.27         72.07         67.57           10.60         15.01         17.06         48.06         11.66         17.00         44.29         51.05         84.00         51.05         66.06         66.06         66.06         66.06         67.57         16.01         66.06         66.	21	72.82	93.84	24.77	24.02	15.01	56.31	120.87	58.56	36,04	22.52	29.28	1
66.82         28.53         48.65         27.03         34.53         11.26         11.21         58.66         38.79         47.30           3.78         40.54         11.28         41.29         40.54         11.28         41.39         44.29         15.30         38.79         44.30           77.82         42.79         11.28         41.29         26.55         25.53         45.79         46.05         160.01           10.66.1         11.56.1         78.83         12.76         48.05         11.66.0         72.07         67.55           4.80         12.76         48.05         11.66.2         88.34         47.30         26.55         62.31         34.53         46.05           4.80         12.76         48.05         11.28         45.04         68.05         45.04         66.06         60.21         30.03           10.76         57.61         48.05         11.28         47.30         26.53         62.01         42.04           40.81         11.28         11.28         11.28         11.28         11.28         11.05         11.05         11.05           40.81         11.28         48.05         11.28         11.28         11.28         11	22	45.79	24.77	11.26	67.57	13.51	93.09	65.31	58.56	27.03	45.04	18.02	
33.78         40.54         11.28.2         40.54         16.52         53.30         54.53         64.53         16.52         16.52         16.52         16.53         45.79         46.06         16.01         16.50         <	23	66.82	28.53	49.55	27.03	34.53	11.26	123.12	58.56	36.79	47.30	35.28	
72.82         42.79         11.26         41.29         27.03         44.29         25.53         45.79         48.05         15.01           70.83         18.18         3.2.86         93.84         55.55         29.26         45.39         57.06         66.06         54.80           106.60         15.70         112.76         18.62         12.01         12.76         13.09         27.06         66.06         54.80           48.80         51.70         48.05         112.61         69.31         47.30         58.66         62.31         34.00           48.80         51.70         48.05         112.61         69.32         51.06         61.06         54.80           40.81         51.70         48.05         61.82         51.06         61.06         54.80         55.55         62.31         30.03           40.81         51.74         51.82         65.31         47.30         54.80         66.06         62.31         30.03           40.81         52.81         68.32         107.36         45.74         66.06         60.81         42.04         66.06         66.06         46.04         46.04         46.04         47.04         66.30         66.06 <t< td=""><td>24</td><td>33.78</td><td>40.54</td><td>123.12</td><td>72.82</td><td>40.54</td><td>66.82</td><td>80.33</td><td>53.30</td><td>34.53</td><td>19.52</td><td>90.09</td><td>- 1</td></t<>	24	33.78	40.54	123.12	72.82	40.54	66.82	80.33	53.30	34.53	19.52	90.09	- 1
56.51         81.83         32.28         93.84         55.55         59.28         143.39         57.06         66.06         54.80           33.78         12.76         46.06         15.01         15.01         15.07         61.05         61.06         65.06         65.06         65.06         65.06         65.06         65.07         65.07         65.07         67.07         67.57         67.07         67.57         67.07         67.57         67.07         67.57         67.07         67.57         67.07         67.57         67.07         67.57         67.07         67.57         67.07         67.57         67.07         67.57         67.07         67.07         67.57         67.07         67.57         67.07         67.27         67.07         67.57         67.07         67.07         67.07         66.06         67.57         67.07         67.77         45.79         66.06         67.07         67.79         42	25	72.82	42.79	11.26	41.29	27.03	44.29	25.53	45.79	48.05	1501	53.30	- 1
106.60         12.76         48.05         145.61         145.61         145.61         145.61         145.61         145.61         145.61         145.61         145.61         145.61         145.61         145.61         145.61         145.61         145.61         145.61         145.61         145.62         145.64         145.62         145.64 <td>26</td> <td>56.31</td> <td>81.83</td> <td>32.28</td> <td>93.84</td> <td>55.55</td> <td>29.28</td> <td>143.39</td> <td>27.06</td> <td>90.09</td> <td>54.80</td> <td>63.81</td> <td>- 1</td>	26	56.31	81.83	32.28	93.84	55.55	29.28	143.39	27.06	90.09	54.80	63.81	- 1
33.78         12.76         36.04         99.10         69.98         2 1/10         69.98         25.51         64.29         51.05         681.06         51.05         681.06         51.05         681.06         51.05         681.06         25.53         34.53         36.04         48.05         112.61         68.34         21.02         69.07         55.55         66.23         34.53         34.53         36.04         45.04         66.23         36.30         36.03         45.04         66.23         36.03         36.03         45.04         66.23         36.03         42.04	27	106.60	15.01	115.61	78.83	12.01	12.76	93.09	20.27	(2.0)	67.57	77.17	- 1
48.50         36.70         48.00         412.61         65.34         47.30         25.53         47.30         47.30         25.53         47.30 <t< td=""><td>28</td><td>33.78</td><td>12.76</td><td>36.04</td><td>99.10</td><td>28.69</td><td>19.70</td><td>44.29</td><td>21.03</td><td>81.08</td><td>51.05</td><td>30.29</td><td>- 1</td></t<>	28	33.78	12.76	36.04	99.10	28.69	19.70	44.29	21.03	81.08	51.05	30.29	- 1
0.0         1.0 <td>53</td> <td>48.80</td> <td>00.70</td> <td>40.03</td> <td>140.02</td> <td>95.54</td> <td>47.90</td> <td>09.07</td> <td>00.00</td> <td>64.00</td> <td>25.40</td> <td>32.78</td> <td>- 1</td>	53	48.80	00.70	40.03	140.02	95.54	47.90	09.07	00.00	64.00	25.40	32.78	- 1
36.04         12.04         57.80         24.77         45.79         61.56         64.56         63.06         60.81         42.79           55.55         18.02         68.32         107.36         43.54         78.83         83.33         39.04         87.09         42.04           105.10         21.77         11.72         37.8         43.54         68.32         66.08         45.04           107.36         27.78         37.54         72.07         17.27         33.78         48.05         69.07         40.54           107.36         27.78         37.54         72.07         17.27         33.78         48.05         69.07         40.54           107.36         27.78         37.54         72.3         34.53         69.07         40.57         80.07         40.54         68.32         59.31         40.54	9	19.76	30.29	40.04 84 82	47.30	25.53	57.81	20.05	36.70	62.31	30.03	73.57	1
55.56         18.02         68.32         107.36         43.54         778.83         88.33         39.04         87.09         42.04           105.10         27.77         18.02         28.53         18.02         30.78         45.04         68.32         66.06         45.79           107.36         27.78         35.28         76.30         54.80         68.32         59.04         40.54           407.36         27.78         35.28         86.59         56.30         40.77         31.53           407.36         27.78         100.60         69.82         25.53         69.07         31.53           40.75         48.65         26.83         10.30         77.33         30.78         76.82         69.07         45.79           40.76         48.70         49.04         45.04         45.04         45.74         44.78         89.82         111.11           10.36         47.71         48.00         77.33         46.76         76.82         66.06         45.79         86.82         86.82         86.82         86.82         86.82         87.10         86.82         86.82         87.83         111.11         111.11         111.11         111.11         111.11	33	36.04	12.76	57.81	24.77	45.79	61.56	64.56	63.06	60.81	42.79	77.33	1
105.10         21.77         18.02         28.53         18.02         30.78         45.04         68.32         66.06         45.79           11.11         32.28         37.54         72.07         17.27         33.78         33.78         46.04         68.32         66.06         45.79           10.36         27.78         35.28         88.59         50.30         69.07         31.53           54.05         57.81         67.57         36.04         12.28         14.26         12.68.7         14.79           10.58         67.57         36.04         103.80         77.33         30.78         75.82         26.28         90.09           10.36         48.80         10.26         77.33         30.78         75.82         26.28         90.09           10.36         48.80         48.20         10.35         45.04         48.00         86.32         45.79           10.36         48.80         48.20         48.00         46.04         48.00         48.79         46.68           10.36         48.80         48.20         48.30         21.77         44.54         48.00         48.50         46.80           20.34         48.20         48.20 <td>55</td> <td>55.55</td> <td>18 02</td> <td>68.32</td> <td>107.36</td> <td>43.54</td> <td>78.83</td> <td>83.33</td> <td>39.04</td> <td>87.09</td> <td>45.04</td> <td>39.04</td> <td>ı</td>	55	55.55	18 02	68.32	107.36	43.54	78.83	83.33	39.04	87.09	45.04	39.04	ı
111.11         32.28         37.54         72.07         17.27         33.78         39.79         48.05         59.31         40.54           61.36         28.28         86.30         47.27         47.27         47.27         46.30         69.82         45.79         46.79         45.74         46	34	105.10	21.77	18.02	28.53	18.02	30.78	45.04	68.32	90.99	45.79	30.78	,
107.36         27.78         35.28         88.59         50.30         54.80         68.32         53.0         69.07         31.53           64.06         28.53         10.60         68.22         25.53         34.53         69.07         31.53         45.79           65.76         28.53         10.60         77.33         34.53         96.09         70.57         86.33         45.79           105.85         67.57         38.04         102.60         77.33         30.78         75.82         52.56         26.28         111.11           105.85         67.57         38.04         45.04         33.03         101.35         66.06         70.57         71.32           101.35         48.80         14.26         26.28         65.31         48.80         21.77         61.56         59.31         68.08           107.36         55.56         42.79         66.06         50.30         94.59         67.57         54.80         108.86           107.36         55.56         42.79         66.06         50.31         42.29         97.60         85.31         145.44           107.36         66.66         42.09         56.31         42.29         97.60         <	35	111.11	32,28	37.54	72.07	17.27	33.78	39.79	48.05	59.31	40.54	58.56	1
54.05         28.53         100.60         69.82         25.53         34.53         96.09         70.57         86.33         45.79           67.76         27.76         100.60         69.82         27.65         10.57         86.33         45.79           105.86         67.57         36.04         103.60         77.33         30.76         16.82         26.26         111.11           10.36         67.57         36.04         45.04         45.04         30.76         10.35         26.26         111.11           10.35         67.57         36.04         45.04         45.04         45.04         45.04         111.11           10.35         47.76         66.82         66.31         48.00         21.57         61.66         76.31         66.06           10.73         48.80         47.79         61.66         76.77         61.66         76.31         168.64         36.31         168.64         36.44         36.31         168.64         36.31         168.64         36.31         168.64         36.48         36.48         36.48         36.48         36.48         36.48         36.48         36.48         36.48         36.49         36.49         36.49         36.49	36	107.36	27.78	35.28	88.59	50.30	54.80	68.32	53.30	69.07	31.53	37.54	- 1
36.79         57.81         67.57         39.04         79.32         14.26         76.87         140.87         39.04         29.26         14.26         14.26         45.04         173.33         30.78         75.82         52.55         26.26         70.57         71.32           90.09         21.07         61.56         45.04         45.04         33.03         101.35         66.06         70.57         71.32           10.36         21.07         61.56         45.04         45.04         45.04         30.03         46.06         70.57         71.32         66.06         70.57         71.32         66.06         70.57         71.32         66.06         70.57         71.32         66.06         70.57         71.32         66.06         70.57         71.32         66.06         70.57         71.32         66.06         70.57         71.32         66.06         70.57         71.32         71.54         71.54         71.54         71.54         71.54         71.54         71.54         71.54         71.54         71.54         71.54         71.54         71.54         71.54         71.54         71.54         71.74         71.57         71.77         71.72         71.73         71.73         71.7	37	54.05	28.53	100.60	69.82	25.53	34.53	96.09	70.57	86.33	45.79	45.79	- 1
90.08         21.57         36.04         10.38         30.78         17.35         30.78         17.35         30.78         17.35         30.78         17.35         30.78         17.35         30.78         17.35         30.78         17.35         30.78         17.35         30.78         17.35         30.78         17.35         30.78         17.35         48.00         21.77         66.06         59.31         66.06         60.06 <th< td=""><td>38</td><td>36.79</td><td>57.81</td><td>67.57</td><td>39.04</td><td>23.28</td><td>14.20</td><td>120.87</td><td>141.88</td><td>29.67</td><td>9.70</td><td>47.29</td><td>- 1</td></th<>	38	36.79	57.81	67.57	39.04	23.28	14.20	120.87	141.88	29.67	9.70	47.29	- 1
90.04         2.7.78         14.26         26.28         45.30         45.04         47.75         61.56         59.31         66.06           92.34         27.78         16.52         51.05         60.06         50.30         94.59         67.57         54.80         108.86           10.736         52.56         42.79         66.28         60.06         50.31         108.11         34.53         145.44           107.36         55.56         42.79         66.82         30.03         35.28         111.86         48.80         28.53         147.44           107.36         55.56         42.79         66.31         42.29         97.60         83.33         38.29         119.13           10.37         18.77         12.76         56.31         29.28         45.79         60.06         21.77         44.29         97.60           85.59         22.28         18.53         45.79         60.06         21.77         44.29         97.60           11.56         34.65         38.78         18.57         18.57         18.32         18.31         18.32           11.56         34.06         32.28         45.79         60.06         21.77         44.29 <t< td=""><td>D. C.</td><td>28.60</td><td>10.70</td><td>30.04</td><td>103.00</td><td>20.77</td><td>30.70</td><td>10.02</td><td>92.33</td><td>70.20</td><td>74.30</td><td>55.55</td><td></td></t<>	D. C.	28.60	10.70	30.04	103.00	20.77	30.70	10.02	92.33	70.20	74.30	55.55	
92.34         27.78         16.52         51.05         60.06         50.30         94.59         67.57         54.80         108.06           128.38         52.56         42.79         32.28         87.09         56.31         108.11         36.04         34.53         145.64           177.30         55.55         42.79         66.82         30.03         35.28         118.11         36.04         34.53         145.64           177.12         21.02         43.54         49.55         66.31         29.28         17.60         83.33         38.29         129.13           90.34         77.33         34.54         49.55         66.31         29.28         36.00         21.77         44.29         87.09           90.39         77.33         34.53         33.78         28.53         45.79         60.06         21.77         44.29         97.60           86.59         27.52         19.52         27.03         56.30         22.52         86.31         29.28         77.37           39.79         15.01         22.52         72.57         57.81         60.06         16.23         44.29         95.34         36.38           39.79         15.01 <td< td=""><td>40</td><td>90.09</td><td>40.90</td><td>96.14</td><td>26.04</td><td>85.24</td><td>20.02</td><td>27.72</td><td>64.56</td><td>50.31</td><td>66.08</td><td>34.53</td><td></td></td<>	40	90.09	40.90	96.14	26.04	85.24	20.02	27.72	64.56	50.31	66.08	34.53	
128.38         52.56         42.79         32.28         87.09         56.31         108.11         36.04         34.53         145.64           107.36         55.55         44.29         66.82         30.03         35.28         111.86         48.80         28.53         15.77           17.12         21.02         43.54         49.55         66.31         44.29         97.60         83.33         38.29         129.13           90.09         77.33         34.53         33.78         28.53         45.79         60.06         21.77         44.29         97.60           88.59         22.85.3         33.78         28.53         45.79         60.06         21.77         44.29         97.60           115.61         54.05         32.28         73.07         57.81         12.01         12.52         86.33         56.31         74.32           39.79         15.01         22.52         72.07         57.81         60.06         16.52         44.29         95.34         36.79           66.62         38.02         44.98         66.71         46.25         46.07         78.66         59.43         56.08         48.05	7.0	200	27.78	16.50	51.50	80.08	50.30	05 70	67.57	54.80	108.86	24 02	1
107.36         55.55         44.29         66.82         30.03         35.28         111.86         48.80         28.53         15.77           107.36         21.02         43.54         49.55         65.31         44.29         97.60         83.33         38.29         179.13           12.34         18.77         12.76         56.31         29.28         85.36         69.06         21.77         44.29         97.60           88.59         27.53         34.53         33.78         28.53         45.79         60.06         21.77         44.29         97.60           15.61         22.52         19.52         27.03         50.30         22.52         86.33         56.31         74.32           39.79         15.01         12.83         87.9         15.01         12.83         87.9         51.80         53.28           46.63         38.79         46.07         78.66         59.43         56.08         48.05	43	128 38	52.55	42.79	32.28	87.09	56.31	108.11	36.04	34.53	145.64	69.82	1
17.72         21.02         43.54         49.55         65.31         44.29         97.60         83.33         38.29         129.13           92.34         18.77         12.76         56.31         29.28         35.28         69.07         61.56         67.57         87.09           90.99         77.33         34.58         33.78         28.53         45.79         60.06         27.77         44.29         97.60           115.61         28.53         22.52         27.03         50.30         22.52         86.33         56.31         74.32           115.61         24.05         27.23         77.81         60.06         16.20         44.29         95.34         36.78           66.62         38.02         44.98         66.71         46.25         46.07         78.66         59.43         56.08         48.05	44	107.36	55.55	44.29	66.82	30.03	35.28	111.86	48.80	28.53	15.77	57.06	1
92.34         18.77         12.76         56.31         29.28         35.28         69.07         61.56         67.57         87.09           90.09         77.33         34.53         33.78         28.53         45.79         60.06         21.77         44.29         97.60           86.59         28.53         22.52         19.52         27.03         50.30         22.52         86.31         74.32           15.61         22.52         72.07         57.81         60.06         16.52         44.29         95.34         36.79           66.62         38.02         44.98         66.71         46.25         46.07         78.66         59.43         56.08         48.05	45	117.12	2100	43 54	49.55	65.31	44 29	97.60	83.33	38.29	129.13	26.28	1
90.09         77.33         34.53         33.78         28.53         45.79         60.06         21.77         44.29         97.60           88.59         28.63         22.52         19.52         27.703         50.30         122.52         86.31         56.31         74.32           18.50         28.63         28.63         18.65         18.09         29.83         56.31         74.32           39.79         15.01         12.83         87.09         51.80         29.34         36.79           39.79         15.01         22.52         72.07         57.81         60.06         16.52         44.29         95.34         36.79           66.62         38.02         44.98         66.71         46.25         46.07         78.66         59.43         56.08         48.05	46	92.34	18.77	12.76	56.31	29.28	35.28	69.07	61.56	67.57	87.09	30.78	
68.59         28.53         22.52         19.52         27.03         50.30         22.52         86.33         56.31         74.32           115.61         54.06         32.28         77.57         39.79         12.01         128.38         87.09         51.80         29.28           38.79         15.01         22.52         77.07         57.81         60.06         16.52         44.29         95.34         36.79           66.62         38.02         44.98         66.71         46.25         46.07         78.66         59.43         56.08         48.05	47	60'06	77.33	34.53	33.78	28.53	45.79	90.09	21.77	44.29	97.60	52.55	1
115.61         54.05         32.28         73.57         39.79         12.01         12.838         87.09         51.80         29.28           39.79         15.01         22.52         72.07         57.81         60.06         16.52         44.29         95.34         36.79           66.62         38.02         44.98         66.71         46.25         46.07         78.66         59.43         56.08         48.05	48	88.59	28.53	22.52	19.52	27.03	50.30	22.52	86.33	56.31	74.32	113.36	
39.79 15.01 22.52 72.07 57.81 60.06 16.52 44.29 95.34 36.79 66.62 38.02 44.98 66.71 46.25 46.07 78.66 59.43 56.08 48.05	49	115.61	54.05	32.28	73.57	39.79	12.01	128.38	87.09	51.80	29.28	44.29	- 1
66.62 38.02 44.98 66.71 46.25 46.07 78.66 59.43 56.08 48.05	20	39.79	15.01	72.57	/2.0/	18.75	90.09	76.61	24.2	45. CK	6/ Q2	18.7	
	doingol.			×		5	42	S S S	7		-	62	

								6526			6530	
Slide No. BC-07-	247 A	247 B	247 C	248 A	248 B	248 C	249 A	249B	249 C	250 A	250 B	250 C
Code BC-07-14	9	62	63	_	12	13	R1	R2	R3	B1	B2	B3
File No. BC-07-14	G1.xls	G2.xds	G3.xls	I1.xls	I2.xls	13.xls	R1.xls	R2.xls	R3.xls	B1.xls	B2.xls	B3.xls
		Tail length			Tail length			Tail length			Tail length	
	98.35	126.12	41.29	91.59	39.04	56.31	112.61	71.32	83.33	72.82	63.81	90.09
	97.60	72.82	47.30	119.37	136.63	47.30	121.62	14.26	69.07	132.88	69.07	70.57
	122.37	37.54	66.58	131.38	80.33	92.09	37.04	48.80	20.28	23.78	29.31	5.5
	39.83	26.70	54.05	33.20	10.07	33.U3	107.04	10.50	50.24	78.82	14.26	11.00
	125 12	30.79	50.05	86.82	21 53	25.53	00 84	84.83	18.52	118.62	83.33	61.50
	75.82	80.78	83.33	104.35	74.33	75.82	60.04	66.82	42.04	52.55	75.07	60 06
	115.61	71.32	75.82	18.02	108.86	27.78	141.89	66.06	124.62	104.35	74.32	57.06
	107.36	25.53	55.55	105.85	58.56	101.35	119.37	49.55	60.81	24.77	54.05	90.99
	114.11	65.31	48.80	70.57	59.31	31.53	123.12	41.29	40.54	96.09	81.08	75.82
	108.86	78.83	29.28	64.56	48.05	20.27	69.82	35,28	56.31	51.05	13.51	73.57
	108.11	111.86	42.79	90.84	48.05	58.56	105.85	56.31	56.31	96.09	57.06	75.82
	153.15	76.58	45.04	98.35	78.08	36.04	157.65	63.06	15.77	15.01	55.55	73.57
	153.15	53.30	24.02	125.37	25.53	51.05	80.08	90.00	20.27	88.59	28.26	32.28
	117.12	45.79	87.09	113.36	84.83	39.04	111.11	42.04	14.26	20.30	35.28	74.32
	102.10	57.81	53.30	96.09	67.57	14.20	118.62	19.52	48.33	39.04	31.33	29.82
	24.05	10.70	20.27	66.66	37.01	26.00	20.00	75.00	24.03	26.36	57.50	92.33
	100.00	00.00	15.04	28.04	68 32	20.04	87.84	15.04	45.70	36.70	42.70	11.26
	88 50	81.83	76.58	88 59	72.82	63.06	136.63	60.81	33.78	72.82	25.53	78.08
Ì	116.36	88.59	54.80	176.42	59,31	42.04	56.31	106.60	33.78	27.78	56.31	28.53
	102.10	78.08	47.30	112.61	40.54	80.33	99.85	73.57	43.54	14.26	38.29	78 08
	100.60	31.53	93.09	47.30	129.13	69.07	87.84	17.27	41.29	54.05	57.81	65.31
	69.07	99.85	77.33	178.68	27.78	59.31	129.88	67.57	46.55	76.58	81.08	90.09
	81.08	18.02	58.56	84.83	86.33	70.57	14.26	78.83	48.80	21.02	57.81	43.54
	116.36	60.06	66.82	104.35	33.03	69.07	43.54	/8.08	25.53	87.84	85.67	93.09
	55.55	114.86	63.06	63.81	12.76	/0.5/	45.04	79.00	13.51	15.77	/6./9	69.82
	80.33	33.30	21.70	105.00	13.67	59 56	144 80	56.31	24.53	15.77	20.30	64.20
	04.50	27.03	22.78	102 10	36.70	57.08	137.38	87.78	33.03	46.55	53.30	63.8
	56.31	30.78	43.54	103.60	69.82	25.53	32.28	63.81	19.52	27.03	45.04	36.79
	21.03	70.70	36.79	80.33	47.30	74.32	59.31	72.82	43.54	27.78	22.52	62.31
	87.09	87.84	76.58	104.35	67.57	90.84	54.05	79.58	11.26	41.29	19.52	69.07
	49.55	24.77	57.06	63.06	23.27	67.57	64.56	54.80	15.01	20.27	14.26	57.81
	30.78	54.05	57.06	84.83	27.03	15.77	60.81	34.53	63.06	39.79	36.04	66.82
	135,13	73.57	64.56	27.78	69.07	42.04	31.53	75.07	39.79	12.01	12.76	36.04
	95.34	88.59	57.81	122.37	47.30	105.10	18.77	/3.5/	30.78	96.85	43.54	33.78
	132.13	27.78	15.01	20.20	22.78	68 32	103.60	12.03	15.77	22.24	22 52	45.70
	33.03	70.57	45.04	114 86	83.33	60.92	109.61	77.33	33 03	64.56	20.22	62.34
	19.52	98.35	12.76	77.33	118.62	51.80	32.28	66.82	27.03	30.03	30.03	28.53
	134.38	61.56	67.57	155.40	78.83	23.27	43.54	20.27	33.78	102.10	15.77	15.77
	142.64	39.04	44.29	102.10	125.37	90.09	47.30	39.79	24.02	97.60	30.03	64.56
	30.03	72.07	54.05	95,34	70.57	45.79	65,31	21.77	24.77	119.37	30.78	17.27
	86.33	41.29	52.55	102.85	57.06	68.32	49.55	59.31	32.28	118.62	19.52	79.58
	87.84	61.56	28.53	108.11	78.83	63.81	42.04	43.54	14.26	116.36	94.59	62.31
	10.51	42.04	47.30	60.81	23.27	86.33	36.04	60.81	19.52	112.61	84.83	08.0V
	134.38	94.09	48.55	50,33	20.00	04.30	07.04	10.77	30.70	43.04	87.09	0.00
	105.85	112.61	40.54	51.80	83.33	69.07	114.11	36.72	33.03	122.37	61.56	86.83
Mean/slide	63.69	66.44	50 75	89.83	6/19		81.02	54.64	66	59.88	49 04	20.65
Masnishimal	=		2	20:00	X XX				2			
		7			200			57.88			55.32	

Test item: Dose	Dimethylhydrazine 20 mg/kg/day (x1)	ay (x1)				Treatment:	26/09/2007	E	
Animal N°	Ì	6535			653/			6538	
Slide No. BC-07-	236 A	236 B	236 C	237 A	237 B	237 C	238 A	238 B	238 C
Code BC-07-14	J1	J2	J3	F1	F2	F3	5	C	ខ
File No. BC-07-14	J1.xls	J2.xls	J3.xls	F1.xls	F2.xls	F3.xls	C1.xls	C2.xls	C3.xls
No, of cell		Tail length			Tail length			Tail length	
	96.09	87.09	64.56	86.33	33.03	101.35	27.78	99.10	117.12
7 5	91.59	88.59	48.05	96.09	44.29	95.34	105.85	44.29	69.82
0 4	69.82	78.83	54.05	77.33	79.58	52.55	82.58	42.04	37.54
3	87.09	99.85	86.33	92.34	87.84	110,36	101.35	129.13	66.82
9	57.81	75.82	84.83	44.29	43.54	140.39	80.33	70.57	56.31
	78.83	57.81	60.81	79.58	19.52	78.83	99.10	65.31	94.59
œ c	105.85	35.28	91.59	90.09	99.10	72.07	106.60	72.07	18.02
D Ç	97.00	102.85	90.03	81.08	95.34	87.08	99.85	175.61	71.32
110	60.83	96 09	49.75	57.81	93.04	45.70	71.32	22.70	78.58
12	90.09	89.34	99.10	99.85	94.59	79.58	56.31	90.09	89.34
13	70.57	58.56	117.87	86.33	74.32	67.57	89.34	109.61	42.79
14	75.82	78.83	92.34	99.85	93.09	28.53	42.79	95.34	48.80
15	97.60	96.85	63.06	94.59	68.32	72.07	69.07	105.85	65.31
16	95.34	53.30	98.35	90.84	92.34	105.10	59.31	78.08	71.32
2	54.05	43.78	68 32	81 08	48.05	30.70	77.33	90.09	00.00
0	100 60	30.05	73.57	28.69	83.33	41.29	57.81	51.05	08.35
20	90.84	75.82	75.07	104.35	90.99	34.53	57.81	45.04	87.09
21	106.60	76.58	129.13	60'96	72.82	91.59	54.05	43.54	114.11
22	57.06	51.05	85.58	79.58	78.08	85.58	69.82	74.32	108.86
23	70.57	78.83	43.54	82.58	138.14	120.12	56.31	63.06	50.30
74	72.07	111.86	54.80	112.2	60.81	446.26	65.37	45.04	99.85
67	36.04	108.60	07.50	90.85	36.70	113.36	61.6	82.58	80.33
27	98,35	75.82	105.10	93.09	48.05	96.09	91.59	53.30	83.33
28	69.82	105.85	77.33	105.85	65.31	24.02	72.07	50.30	129.13
29	20.69	66.82	58.56	95.34	83.33	149.40	93.09	71.32	84.08
30	63.06	111.11	64.56	25.53	33.78	108.86	63.06	47.30	87.84
31	56.31	102.10	42.79	21.77	36.79	93.84	90.84	135.13	86.33
32	28.53	124.62	60.81	69.07	61.56	81.08	55.55	90.06	89.34
33	90.08	143.39	113.30	90.08	62.31	80.33	99.10	89.34	84.08
7.5	22.00	107.36	75.82	27.00	42.04	135 88	88 20	22.33	117 13
38	102.85	84.08	62.31	40.54	94.59	45 79	8183	107.36	126.87
37	49.55	63.06	81.08	69.07	107.36	63.06	70.57	54.05	119.37
38	107.36	65.31	51.05	94.59	102.85	78.83	77.33	81.08	52.55
33	46.55	96.85	58.56	86.33	56.31	64.56	89.34	53.30	51.05
04	84.83	89.34	90.99	45.79	56.31	77.33	93.84	40.54	98.35
- 67	33.03	148.30	39.04	70.57	152.40	93.84	17.32	81.83	102.10
43	67.57	75.82	66.82	104.35	77.33	83.33	81.83	65.31	69.82
44	53.30	77.33	77.33	117.12	113.36	43.54	75.82	99.10	92.34
45	140.39	118.62	67.57	57.06	78.83	138.89	55.55	85.58	41.29
46	44.29	42.04	63.81	79.58	93.09	99.10	94.59	135.13	96.85
47	62.31	47.30	61.56	87.09	121.62	80.33	55.55	78.83	75.82
40	19.52	35.28	80.33	89.34	102.85	64.56	60.81	72.07	45.04
205	41.29	94.50	93.09	90,99	102.40	04.00	112.80	21.77	41.29
Mean/slide	74.43	82.9	4 23	8/1/8	78 12	84.49	× *	*	*
Mean/animal		76.18			81.45			74.49	2

FSR-IPL 070402 / CATECHOL / RHODIA

f DNA / DUODENUM
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Column   C	Dose.	U IIIg/Rg/day (XZ	25.0			E F A A						44.45	
Oliver   Colore   C	NO BC-07-	A 656	73.5	2326	733 ∆	733 R	233 C	23.4 A	234 B	234 C	235 ∆	735 1	235.0
OTAM         OTAM         CASA         CASA         CASA         DIAS         DIAS         OTAM         OTAM <th< th=""><th>e BC-07-14</th><th></th><th>025</th><th>03</th><th>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</th><th></th><th>£3</th><th>10</th><th>, D2</th><th>23</th><th>01</th><th>025</th><th>) (2)</th></th<>	e BC-07-14		025	03	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		£3	10	, D2	23	01	025	) (2)
5.76         Ya. Diva In all (1772)         Y	No. BC-07-14		Q2.xls			K2.xts			D2.xls	D3.xls		O2.xls	٥
1975   1975	of cell	Н	% DNA in tail	L	Ш	% DNA in tail	П		% DNA in tail			% DNA in tail	
March   Marc	1		31.36	3.13	37.95	2.63	56.58	85.18	41.40	14.02	Н	0.39	
Color	2	30.94	39.91	4.68	8.72	1.29	3.42	50.62	83.60	6.22	39.04	10.93	0.20
67.69         1.61         1.772         2.776         1.12         2.536         2.537         2.549         1.62         3.547         3.	3	20.20	1.43	13.03	17.10	14.50	25.04	82.59	54 80	38.66	0.72	1.20	63.60
65.76         65.76         65.76         65.76         65.76         65.76         65.76         65.76         65.76         65.76         65.76         65.77         65.76         65.77         65.76         65.77 <th< td=""><td>t ko</td><td>51.69</td><td>18.</td><td>17.72</td><td>22.79</td><td>122</td><td>43.59</td><td>53.85</td><td>20.31</td><td>26.91</td><td>10.23</td><td>33.62</td><td>27.5</td></th<>	t ko	51.69	18.	17.72	22.79	122	43.59	53.85	20.31	26.91	10.23	33.62	27.5
1,1,25         6,47         1,92         1,55,73         4,42         18,59         86,54         0,00         1,151         0,00         0,00           1,18         30,22         4,57         18,58         4,42         18,53         0,00	9	65.76	0.56	25.75	7.17	0.11	21.73	39.24	45.80	0.00	72.55	61.90	0.05
1,14	7	71.25	6.47	0.24	25.73	4.22	18.59	85.34	0.00	11.51	0.00	0.04	61.32
0.05         1.8.4         0.05         1.8.4         0.05         1.8.4         0.05         1.8.4         0.05         1.8.4         0.05         1.8.4         0.05         1.8.4         0.05         1.8.4         0.05         1.8.4         0.05         1.8.4         0.05         1.8.4         0.05         1.8.4         0.05         1.8.4         0.05         1.8.4         0.05         1.8.4         0.05         1.8.4         0.05         1.8.4         0.05         1.8.4         0.05         1.8.4         0.05         0.	8	4.44	1.02	4.97	3.82	44.37	23.52	85.75	1.91	13.93	0.04	0.43	30.98
Columbridge   Columbridge	6	1.18	30.22	0.29	19.84	40.96	0.47	22.15	41.15	15.94	26.13	47.95	9.0
20.77.2         0.79.9         1.78.9         0.73.4         4.79.9         0.79.9         0.79.9         1.78.9         0.79.9         1.78.9         0.79.9         1.78.9         0.79.9	10	0.35	19.34	0.27	1.75	9.67	17.66	12.81	12.67	75.53	57.54	0.73	3.20
9.71         0.08         7.10         28.78         1.00         0.04         6.67         24.11           9.71         0.02         7.89         7.80         0.02         0.04         6.69         0.02         0.04         0.04         0.04         0.04         0.04         0.04         0.04         0.04         0.05         0.04         0.05         0.04         0.05         0.04         0.05	12	20.22	0.19	1 08	0.34	19.68	0.18	63.00	9.07	27.62	4.52	1.32	0.37
6.78         6.90         7.54         9.68         0.00         7.64         6.92         9.23         0.07           0.44         7.91         51.28         0.01         4.127         4.241         0.09         5.26         0.29         3.29         0.07           0.44         7.91         51.28         0.01         4.127         4.241         0.09         5.07         0.09         3.56         0.07         0.09         3.56         0.07         0.09         3.56         0.07         0.07         0.09         5.06         0.07         0.09         5.06         0.07         0.09         5.06         0.07         0.09         5.06         0.07         0.09         5.06         0.07         0.09         5.06         0.07         0.09         5.06         0.07         0.09         5.06         0.07         0.09         5.06         0.07         0.09         0.07         0.09 <td< td=""><td>13</td><td>9.71</td><td>0.87</td><td>1.03</td><td>28.28</td><td>4.57</td><td>12.96</td><td>53.36</td><td>0.00</td><td>0.04</td><td>6.97</td><td>24.14</td><td>6.11</td></td<>	13	9.71	0.87	1.03	28.28	4.57	12.96	53.36	0.00	0.04	6.97	24.14	6.11
0.02         6.96         3.3.01         30.46         6.560         0.04         6.96         3.0.0         3.0.0         0.02         6.4.48         0.00         6.54         0.00         3.0.0         3.0.0         0.00         1.00         0.00         1.00         0.00         1.00         0.00         1.00         0.00         1.00         0.00         1.00         0.00         1.00         0.00         1.00         0.00         1.00         0.00	14	6.78	0.00	7.84	75.49	49.68	0.00	7.05	2.58	69.25	32.30	0.07	0.00
0.04         17.01         51.28         0.001         44.87         42.41         0.09         5.97         0.09         5.05         0.75           0.00         7.94         3.28         0.01         4.03         3.14         5.28         2.713         0.07         5.69         0.77           0.00         5.56         0.15         0.09         1.48         5.28         2.713         0.07         0.56         0.77           0.00         5.56         0.00         1.67         0.09         1.67         4.88         0.07         0	15	0.02	6.95	33.01	36.48	55.60	0.04	64.48	0.03	0.24	31.89	98.55	14.79
0.00         7.94         3.126         0.729         40.31         3.14         0.00         6.97         90.21         0.63         3.16           0.00         7.94         3.126         0.129         4.03         3.14         0.00         6.97         4.86         6.97         0.00         6.97         6.01         6.02         6.01         6.01         6.01         6.01         6.01         6.01         6.01         6.01         6.01         6.01         6.01         6.01         6.01         6.01         6.01         6.01         6.01         6.01         6.01	16	0.44	17.01	51.28	0.01	41.27	42.41	66.69	49.64	0.99	3.05	0.75	39.93
0.00         54.74         0.17         3.58         1.48         3.26.0         6.71         6.94         88.35         1.69         6.71         6.94         88.35         1.69         6.71         0.00         5.76         6.94         88.35         1.69         6.71         0.70         0.00         55.68         4.68         0.00         1.68         1.69         0.00         5.68         4.68         0.00         6.71         0.01         0.00         5.76         0.00         5.76         0.26         0.27         0.24         0.37         0.01         0.01         0.01         1.22         2.48         8.70         0.02         6.74         1.72         3.68         6.74         1.72         3.68         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.01         0.02	17	0.00	7.94	3.26	0.29	40.31	3.11	0.00	5.97	90.21	0.53	3.16	0.02
0.00         55.68         4.66         0.00         10.20         6.94         89.20         6.94         89.20         0.00         0.01         0.00	200	10.11	0.37	3 60	16.51	37.70	1.48	28.26	27.13	60.79	25.36	87.78	1.51
0.00         65.32         2.488         1.77         30.50         62.46         15.72         0.01           7.289         1.056         14.32         3.69         1.22         3.68         1.05         1.69         1.61         33.76         1.05         1.61         33.76         1.05	20	000	53.68	46.68	000	18 79	10.9	88 33	19.84	83.26	0.0	00.11	0.74
7.2.89         10.66         14.57         2.19         12.22         8.89         66.64         1.72         33.93         5.449         33.76           77.89         1.06         14.57         2.19         12.21         8.89         6.64         1.72         33.93         5.449         33.76           77.89         2.23         44.73         16.19         27.17         8.94.5         7.00         4.22         0.01           4.105         2.26         41.42         0.05         36.54         1.07         8.94.5         7.02         4.02         0.11           4.105         2.26         0.14         0.05         36.54         4.07         1.29         3.68         0.00         1.18         4.05         1.00         4.02         1.18         1.00         1.29         3.68         0.00         1.18         4.01         1.29         3.68         0.00         1.18         4.01         1.29         3.73         0.00         1.18         4.02         1.00         1.29         3.73         0.00         1.18         4.01         1.29         3.73         0.00         1.18         0.00         1.29         0.00         1.18         0.00         1.29         0.00<	21	00:00	54.32	3.08	13.57	5.53	24.68	1.77	39.50	62.45	15.12	0.01	13.37
9.43         1.08         36.46         0.00         13.48         23.19         17.78         0.07         0.04         0.08         71.38           17.69         2.33         22.23         44.42         0.00         9.14         23.19         17.89         16.07         0.07         10.08         73.43           41.65         2.36         0.14         0.07         36.56         14.85         2.90         1.29         77.55         20.00         4.85         0.17           0.04         62.78         0.44         0.45         2.90         1.29         37.55         0.00         1.78           0.05         2.36         0.45         2.00         2.40         2.20         1.79         37.55         0.00         5.48           1.081         3.89         3.197         0.02         2.22         2.37         0.00         2.22         1.34         0.00         1.78         3.75         0.00         5.74         1.79         37.55         0.00         2.54         1.44         0.00         1.78         0.00         1.78         0.00         1.78         0.00         1.78         0.00         1.78         0.00         1.78         0.00         1.78	22	72.89	10.56	14.57	2.19	12.22	8.98	66.64	1.72	33.63	54.49	33.76	0.00
7.68         2.33         2.22.3         44.73         19.19         27.17         89.45         7.69         16.07         4.22.8         71.38           4.105         2.36         41.43         0.00         9.14         35.98         1.07         81.03         4.43         1.55         26.30         0.178           4.105         2.36         0.14         0.015         35.98         1.07         81.03         4.43         1.55         26.30         0.178           0.97         9.34         0.105         1.29         2.406         1.73         3.68         0.10         1.78         0.10         1.78         0.10         0.10         1.78         0.10 </td <td>23</td> <td>9.43</td> <td>1.08</td> <td>36.46</td> <td>0.00</td> <td>13.48</td> <td>23.19</td> <td>17.78</td> <td>0.07</td> <td>0.43</td> <td>90.0</td> <td>33.43</td> <td>0.32</td>	23	9.43	1.08	36.46	0.00	13.48	23.19	17.78	0.07	0.43	90.0	33.43	0.32
41.05         2.36         0.14         0.15         35.99         1.07         81.03         4.43         1.50         1.71           41.05         2.36         0.14         0.15         35.99         1.07         81.03         4.43         1.50         1.78           0.54         9.78         1.43         0.04         1.189         4.68         8.83         1.55         0.20         1.78           2.78         8.45         2.02         4.001         7.39         2.406         7.275         0.09         4.43         0.00         5.34           1.209         2.55         2.23         0.00         2.025         0.12         0.00         5.34         0.00 <th< td=""><td>24</td><td>10.50</td><td>2.33</td><td>22.23</td><td>44.73</td><td>19.19</td><td>27.17</td><td>89.43</td><td>7.69</td><td>16.07</td><td>42.28</td><td>71.38</td><td>31.36</td></th<>	24	10.50	2.33	22.23	44.73	19.19	27.17	89.43	7.69	16.07	42.28	71.38	31.36
0.54         62.79         6.43         0.43         11.89         46.88         68.99         3.68         44.82         16.50         1.18           2.97         8.57         2.00         7.29         2.75         0.20         67.35         0.48           2.78         8.45         2.00         30.55         14.54         2.90         17.59         37.55         0.20         67.35         0.48           2.78         8.45         2.00         7.39         24.06         7.20         48.52         25.44         0.00         5.34           1.20         2.55         2.20         2.00         2.00         2.00         20.00	26	41.05	2.36	0.14	0.15	35.98	107	81.03	4.43	1.53	26.30	22	013
0.87         9.35         56.07         30.55         14.54         2.90         1.29         37.55         0.20         57.95         0.48           1.081         3.84         20.25         40.05         40.27         40.08         2.406         7.275         0.09         44.44         0.00         5.735           1.0.61         3.89         31.37         0.027         0.38         2.206         3.772         46.52         25.44         0.00         64.52           1.2.00         7.48         48.52         68.10         9.39         2.86.7         13.49         0.00         2.85         0.08         2.85         0.00         2.85         0.00         2.85         0.00         2.85         0.00         2.85         0.00         2.85         0.00         2.85         0.00         2.85         0.00         2.85         0.00         2.85         0.00         2.85         0.00         2.85         0.00         2.85         0.00         2.85         0.00         2.85         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00	27	0.64	62.78	14.33	0.43	11.89	46.88	83.91	3.68	44.82	16.50	1.18	0.00
2.78         8.45         2.0.25         40.01         7.39         24.06         72.75         0.09         43.44         0.00         5.34           12.09         2.86         2.0.25         2.406         3.72         0.09         4.344         0.00         5.34         31.49         6.13         1.27         0.00         1.49         0.06         20.82         3.82         66.10         9.99         28.62         6.17         64.52         5.24         31.49         6.13         1.314         5.24         31.49         0.00         6.13         1.314         5.02         6.17         64.52         5.24         31.44         6.00         2.83         9.85         76.52         6.25         6.17         6.26         0.00         2.83         9.95         6.56         0.56         0.00         2.83         9.95         0.01         0.56         0.00         2.83         9.95         0.17         0.86         1.27         0.00         0	28	0.97	9.35	56.07	30.55	14.54	2.90	1.29	37.55	0.20	57.95	0.48	9.75
10.81         25.89         21.97         0.27         0.27         0.24         27.08         3.73         7.02         48.52         25.44         31.49           12.60         25.89         28.82         68.10         9.99         28.62         6.17         6.13         8.62         6.17         6.42         9.06         6.07         6.08         8.60         6.17         6.13         8.61         6.02         6.17         6.13         8.67         2.86         8.62         6.17         6.13         8.67         2.96         6.73         6.02         6.08         8.60         0.06         6.00         0.06         6.00         0.06         6.00         0.00         1.26         6.25         8.62         6.17         6.25         6.00         2.95         6.00         0.00         1.27         0.09         7.36         6.00         0.00         1.27         0.09         7.36         6.00         0.00         2.95         6.00         0.00         0.00         1.27         0.08         7.36         0.00         1.27         0.00         1.27         0.00         1.27         0.00         1.27         0.00         1.27         0.00         0.00         0.00         0.00	29	2.78	8.45	20.25	40.01	7.39	24.06	72.75	60.0	43.44	0.00	5.34	1.34
12.09         2.53         2.37         0.00         20.82         5.87         68.10         9.99         28.50         6.53         6.53         6.53         6.53         6.53         6.53         6.53         6.53         6.53         6.53         6.45         7.65         6.53         6.00         2.83         6.00         2.83         6.00         2.83         6.00         2.83         6.00         2.83         6.00         2.83         6.00         2.83         6.00         2.83         6.00         2.83         6.00         2.84         1.72         0.17         0.88         1.37         6.25         2.46         1.62         2.83         6.00         2.84         1.62         2.84         1.72         0.17         0.88         1.37         6.25         2.46         1.62         2.83         6.63         6.25         2.46         0.00         2.83         6.73         0.00         0.00         0.00	30	10.81	3.89	31.97	0.27	0.34 0.34	22.08	3.73	7.02	48.52	25.44	31.49	40.0
56.70         28.14         0.09         14.30         1.20         1.20         1.60	31	12.09	25.52	2.3/	0.00	20.82	3.82	68.10	9.99	28.62	6.17	64.52	24.50
67.03         9.34         0.00         55.07         29.35         7.34         56.58         8.96         0.56         0.00         2.83           9.74         0.07         2.64.4         0.33         30.75         0.03         49.85         31.4         1.27         0.08         73.66           0.07         2.64.4         0.33         3.075         0.013         85.29         2.95         0.55         2.06         0.00         2.83           1.25         5.60         47.09         0.01         52.44         1.72         0.17         0.65         2.49         0.55         2.49         0.56         2.49         0.66         1.625         0.00         2.83         0.01         0.17         0.07         0.66         0.00         0.51         0.00         0.61         0.00         0.66         0.00         0.67         0.00         0.64         0.00         0.00         0.00         0.00         0.00         0.64         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00	33	59 17	28 14	60.0	14.39	17.73	54.95	76.52	35.03	55.36	40.22	20.U0	32.01
97.4         0.07         26.44         0.33         30.75         0.03         49.85         31.14         1.27         0.99         73.66           0.07         5.60         47.09         0.04         8.53         4.23         0.012         867.99         2.95         0.055         2.46         16.25           1.07         47.00         0.04         8.53         4.23         0.012         867.99         0.37         0.09         73.75         0.00         0.00         0.00         0.01         2.84         1.07         0.05         0.00	35	67.03	934	00:00	55.07	29.35	7.34	56.58	8.96	0.56	0.00	2 83	371
0.01         5.75         0.04         8.53         4.23         0.12         85.29         2.95         0.65         2.46         16.26           4.125         5.60         4.709         0.01         15.24         1.72         0.17         0.88         13.77         5.73         0.86           4.126         1.50         4.72         1.49         21.97         46.38         15.77         5.73         0.06           2.94         22.07         7.590         1.83         40.32         7.689         7.918         7.62         54.90         0.51         0.00           4.08         6.37         4.307         0.02         18.70         4.57         6.45         2.86         0.45         0.02           6.83         42.83         59.01         1.56         0.00         4.22         16.37         81.71         43.16         1.54         9.77           57.56         0.05         1.487         2.04         2.04         0.00         2.94         0.00         0.00           57.56         0.45         0.50         0.53         0.63         0.63         0.64         0.00         0.00         0.00         0.00         0.00         0.00	35	9.74	0.07	26.44	0.33	30.75	0.03	49.85	31.14	1.27	0.98	73.66	2.69
1.25         5.60         47.09         0.01         52.44         1.72         0.17         0.88         1.37         5.73         0.66           4.125         1.50         47.09         0.01         1.93         1.49         1.49         0.17         0.86         1.63         0.64         0.00           2.94         22.07         75.90         1.93         40.32         76.89         76.8         1.66         0.51         0.00           0.01         0.37         6.23         5.20         2.94         76.7         5.45         2.88         0.00           4.08         1.65         0.30         0.22         18.70         4.27         5.45         2.88         0.28           66.83         42.83         5.60         0.00         4.22         16.37         46.30         2.94         0.00         0.00           57.56         0.00         4.22         16.37         46.30         2.94         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0	36	0.01	5.75	0.04	8.53	4,23	0.12	85,29	2.95	0.55	2.46	16,25	4.63
41.97         11.24         1.91         0.74         13.33         1.49         27.97         46.95         16.35         64.30         0.00           0.04         0.27         6.23         5.20         2.83         76.89         79.86         76.89         79.82         54.90         0.51         0.02           44.36         16.37         6.23         45.66         66.81         45.07         0.07         4.52         54.90         0.54         2.98           44.83         45.66         66.81         45.07         0.00         4.22         16.37         84.346         6.45         0.57           66.83         42.83         59.00         4.22         16.37         84.346         0.54         9.57           66.83         4.26         0.00         4.22         16.37         84.346         0.50         0.50           42.36         0.05         2.34         3.22         33.23         46.30         29.41         0.50         0.50           32.36         1.30         15.16         2.5.58         18.08         24.25         57.98         0.12         16.20           386         2.86         0.56         0.57         0.56 <td< td=""><td>37</td><td>1.25</td><td>5.60</td><td>47.09</td><td>0.01</td><td>52.44</td><td>1.72</td><td>0.17</td><td>0.88</td><td>13.77</td><td>5.73</td><td>99.0</td><td>1.79</td></td<>	37	1.25	5.60	47.09	0.01	52.44	1.72	0.17	0.88	13.77	5.73	99.0	1.79
0.71         0.37         6.23         5.20         2.83         9.95         36.70         7.07         5.45         2.08           44.98         16.35         6.881         43.07         0.02         18.70         4.52         61.55         4.59         0.42           66.35         4.283         6.36         0.07         4.22         16.37         81.71         4.51         1.54         9.57           66.35         4.286         6.881         4.307         0.02         18.70         4.52         61.55         4.59         0.42           66.35         0.44         2.04         2.04         2.00         49.22         16.37         81.71         4.51         1.54         9.57           7.35         0.00         1.486         0.45         2.04         2.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         1.64         37.12         4.26         3.43         0.01         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00	30	41.97	22.07	75.00	1 0.74	13.23	76.80	21.97	76.95	16.63	6.43	00.00	12.49
44.96         16.35         43.66         68.81         43.07         0.02         18.70         45.2         61.55         4.59         0.42           66.83         42.83         43.66         68.81         43.07         0.00         4.52         61.55         61.55         4.59         0.42           66.83         42.83         59.01         1.56         0.00         4.22         16.37         81.71         43.16         1.54         9.57           66.83         42.86         0.04         2.04         28.73         33.23         46.30         29.41         0.00         0.00           14.86         0.45         8.90         63.60         49.22         0.00         33.23         46.30         29.41         0.00         0.00           23.35         50.63         0.45         0.01         0.56         25.58         18.06         24.25         57.98         0.12         16.82           23.8         5.81         20.71         2.94         57.87         59.60         16.4         37.12         4.26         3.40           23.8         5.81         20.71         27.49         2.93         18.01         20.02         20.93         44.33	40	0.01	0.37	6.23	5.20	283	0.00	36.63	0.47	50.79	5.45	2000	43.36
6683         42.83         59.01         1.56         0.00         4.22         16.37         81.71         43.16         1.54         9.57           57.56         0.00         14.87         2.04         2.04         2.04         0.00         0.00           32.35         0.05         14.87         6.20         0.00         33.99         59.41         0.00         0.00           32.35         0.00         2.36         13.0         45.12         2.558         18.08         24.25         57.98         0.12         16.82           3.86         5.063         45.50         0.01         0.01         1.00         1.25         57.98         0.01         1.682           2.38         5.81         2.071         2.945         57.87         59.60         16.26         41.96         32.36         31.63         0.01           0.10         8.46         13.11         2.749         2.948         57.87         2.948         31.83         0.08           0.10         8.46         13.11         2.140         1.041         5.32         2.03         44.33         1.64           0.10         1.24         1.24         1.746         2.144         1.7	41	44.98	16.35	43.66	68.81	43.07	0.02	18.70	4.52	61.55	4.59	0.42	40.85
57.55         0.00         14.87         2.04         28.73         5.32         33.23         46.30         29.41         0.00         0.00           1.36         0.45         8.90         63.60         49.22         0.00         33.99         59.29         35.65         49.30         0.00           22.36         0.00         2.35         1.30         15.16         25.58         18.09         50.25         57.98         0.12         16.82           0.86         0.55         0.51         0.35         17.65         0.01         0.00         32.7         3.20         0.01           0.10         8.46         13.11         22.45         57.87         59.60         16.26         41.96         32.36         31.63         0.08           0.10         8.46         13.11         27.49         29.08         18.01         0.02         20.36         1.64         37.26         31.63         0.08           0.10         8.46         13.11         27.49         29.38         18.01         20.33         4.43         1.64           0.10         1.80         2.21         1.04         5.32         57.89         1.25         1.24         0.09	42	66.83	42.83	59.01	1.56	0.00	4.22	16.37	81.71	43.16	1.54	9.57	0.04
14.86         0.45         8.90         63.60         49.22         0.00         33.99         59.29         35.65         49.30         0.00           22.35         0.00         2.36         1.30         1.516         2.55.68         18.08         24.25         57.96         0.12         16.82           3.25         3.66         0.01         0.36         18.59         40.69         0.00         3.21         3.20         0.01           0.25         15.96         0.53         47.45         0.01         0.00         1.64         37.12         4.26         3.43           0.38         5.81         20.71         2.945         57.87         59.60         16.26         41.96         32.36         31.63         0.08           0.05         4.18         44.50         2.37         21.40         10.41         5.32         57.99         1.25         12.21         0.08           2.1.94         15.76         18.59         15.68         22.14         17.96         43.61         21.94         29.28         16.43         15.54	43	57.55	0.00	14.87	2.04	28.73	5.32	33.23	46.30	29.41	0.00	00'0	72.21
24.55         0.00         2.425         0.12         1.50         2.53         1.50         2.50         0.12         16.82           3.86         50.63         45.90         0.01         0.36         18.59         40.69         0.00         32.1         3.20         0.01           0.25         15.98         0.56         0.53         47.45         0.01         0.00         1.64         37.12         4.26         3.43           2.38         5.81         20.71         2.945         57.87         59.60         16.26         41.86         32.36         31.63         0.08           0.10         4.18         44.50         2.37         21.40         10.41         5.32         57.39         1.25         12.21         0.08           2.1.94         15.76         18.59         15.68         2.214         17.96         43.61         21.94         29.28         16.43         15.54	44	14.86	0.45	8.90	63.60	49.22	0.00	33.99	59.29	35.65	49.30	0.00	31.08
0.00         1.50         0.01         0.01         0.00         1.64         37.12         3.24         0.01           2.38         5.81         2.071         2.945         6.787         5.960         16.26         41.96         32.36         31.63         0.08           0.10         8.46         13.11         27.49         4.90         2.938         18.01         0.02         2.033         44.33         1.64           0.10         8.48         13.11         27.49         2.34         1.04         5.32         57.99         1.25         1.24           2.1.94         15.76         18.59         12.6         12.5         12.1         0.00	40	32.35	0.00	2.33	0.50	15.16	25.58	18.08	24.25	86.76	0.12	16.82	39.47
2.38         5.81         20.71         29.45         57.87         59.60         16.26         41.96         32.36         31.63         0.08           0.10         8.46         13.11         27.49         4.90         29.38         18.01         0.02         20.93         44.33         1.64           0.10         8.45         2.37         21.40         10.41         5.32         57.89         1.25         12.11         0.00           2.194         15.76         18.59         15.68         22.14         17.96         43.61         21.94         29.28         16.43         16.43         15.54	47	0.25	15.98	156	0.01	47.45	0.09	60.09	0.00	3.21	3.20	3.43	38.18
0.10         8.46         13.11         27.49         4.90         29.38         18.01         0.02         20.93         44.33         1.64           0.05         4.18         44.50         2.37         21.40         10.41         5.32         57.99         1.25         12.21         0.00           21.94         15.76         18.59         15.68         22.14         17.96         43.61         21.94         29.28         16.43         15.54	48	2.38	5.81	20.71	29.45	57.87	59.60	16.26	95.17	32.36	31.63	24:0	12.10
0.05 4.18 44.50 2.37 21.40 10.41 5.32 57.99 1.25 12.21 0.00 21.94 15.76 18.59 15.68 2.2.14 17.96 43.61 2.194 29.28 16.43 15.54	49	0.10	8.46	13.11	27.49	4.90	29.38	18.01	0.02	20.93	44.33	1.64	3.00
21.34 15.76 18.59 15.68 22.14 17.96 43.61 21.94 29.28 16.43	50	0.05	4.18	44.50	2.37	21.40	10.41	5.32	57.99	1.25	12.21	000	8.69
	Mean/slide	21.94	15.76	18.59	15.68	22,14	17.96	43.61	21.94	29.28	16.43	15.54	18.12

Animal N°	100 119/19/19	6518			6517			6520			6519	
No. BC-07-	Ž	239 B	239 C	240 A	240 B	240 C	241 A	241B	241 C	242 A	242 B	242 C
BC-07-14		Н2		Ā	M2	M3		S2	S3		N2	S3
File No. BC-07-14	H1.xls	H2.xls	Н	M1.xls	M2.xls	M3.xls	S1.xls		S3.xls	N1.xls	N2.xls	N3.xls
No. of cell		% DNA in tail	1		% DNA in tail		ı	% DNA in tail			% DNA in tail	
_	0.15	61.09	П	0.56	23.20	7.92	60.89	1.80	54.56	22.87	1.04	8.36
2	54.46	14.60	1.97	8.27	29.54	58.81	2.33	5.69	0.10	65.66	35.04	35.58
	77.86	0.40	21.29	57.79	13.65	8.90	79.67	0.09	15.75	0.26	34.92	45.24
<b>4</b> n	44.29	22.04	0.00	22.27	11.47	3.23	4.65	36.36	0.39	12.37	70.64	50.03
C	20,03	20.04	38.06	3 60	18.02	3.00	40.29	50.03	00.0	46.70	64.50	2.25
0	35.75	20.50	30.00	9,030	5 55	74.19	33	80.0	000	#0.78 82.62	107	78.37
α	000	76.73	0.04	14.86	27.30	32.05	156	0.40	67.75	58 29	351	0.28
σ	63.85	0.62	5.92	8.54	0.65	52.08	51.10	25.94	3 99	144	301	23.22
40	50.66	83.68	60 89	48.42	24.37	0.07	38.81	83 94	14.94	06.0	18 49	33 77
11	0.00	0.01	0.00	1.12	23.58	4.58	0.11	30.21	66.28	23.43	45.31	1.96
12	4.68	0.00	0.00	5.62	42.93	11.05	11.50	13.63	0.19	48.60	48.55	20.25
13	0.00	0.00	3.17	52.11	7.20	16.18	6.68	90.0	0.00	9.80	25.34	35.34
4	4.77	26.43	0.00	82.96	40.96	7.37	0.57	89.6	00.0	59.57	0.00	71.06
15	0.01	67.46	5,45	1.78	6.50	34.74	1.61	0.05	0.00	1.37	0.10	8.73
16	13.05	0.17	44.50	8.27	37.51	15.64	8.38	7.47	25.54	0.17	32.57	7.73
17	6.38	56.23	19.76	0.46	19.16	55.69	2.57	0.05	0.10	76.16	34.62	11.00
18	1.02	76.05	15.82	33.18	46.88	5.90	10.40	70.05	0.12	67.26	2.10	3.90
19	2.19	3.86	28.00	83.09	83.44	15.57	10.40	75.45	0.32	37.06	50.62	12.66
20	17.59	00.0	13.48	3.04	11.30	0.14	76.41	0.00	90'6	5.10	60.42	1.72
21	00'0	56.19	2.93	14.80	39.82	9.99	0.11	28.30	0.13	06'0	34.72	14.24
22	73.87	0.02	2.52	64.63	3.40	1.65	0.00	10.69	92.64	4.27	96.6	5.78
23	0.06	73.94	0.41	5.57	09.0	49.22	0.01	38.58	1.09	14.35	18.56	21.48
24	61.49	0.18	0.16	39.42	5.31	20.82	1.43	0.00	1.15	44.91	14.61	0.42
52	19.51	1.11	0.11	3.75	99.08	30.23	4.41	20.54	61.44	36.7	37.72	84.75
07	2.58	0.0	0,40	20.00	00.00	00.27	000	0.0	0.10	10.0	2.7	70.70
/7	00.7	70.0	24.25	0.00	32.50	20.0	60.63	9.07	15.07	00.7	20.20	30.00
07	20.03	4.54	20.0	2.33	32.00	40.03	25.42	0.00	10.07	20.70	14.45	<u>+</u>
R7	7700	99 90	0.05	1.10	40.74	40.4	300	200	100	0/.	2.0	2.33
34	65.30	1 28	0.10	18.81	24.04	0.73	55.04	11.00	900	10.00	90.0	4.7.
22	25.73	39.04	10.30	20.0	7 2.4	80.78	25.00	77.0	36	27.30	0.90	02.20
33	44.76	5.00	45.04	4 19	37.38	4.33	146	90.0	5.00	91.00	81.48	23.4
35	6.97	85.59	2.17	6.63	2.43	71.06	31 93	0.22	16.25	15.46	2.91	82.53
35	19 00	4 40	8 83	8.44	32.27	33 09	000	34.73	95.23	37.83	4.57	81.37
36	2.24	3.16	48 90	14.87	47.73	66.88	400	32.94	44 17	4 46	0.17	14.24
37	2.43	50.96	47.63	7.96	33.78	4.18	3.58	33.93	83.74	62.57	17.85	0.97
38	2.73	24.98	0.00	35.97	34.41	2.29	2.67	22.97	42.55	14.91	0.03	2.02
39	75.45	2.42	70.13	0.58	59.99	16.49	0.00	3.84	39.96	0.09	5.81	0.16
40	0.08	1.88	38.60	15.96	28.46	1.72	48.93	3.03	11.77	6.89	1.16	11.28
41	4.36	0.90	21.53	6.45	24.55	0.00	0.00	75.98	0.26	32.19	0.68	2.12
42	4.75	2.86	0.22	1.57	8.84	16.52	0.00	0.16	49.86	18.13	10.79	2.82
43	0.36	62.93	69.44	2.00	69.95	65.56	36.98	0.14	61.26	46.35	1.26	82.28
44	24.52	17.74	72.22	5.20	60.13	16.32	0.43	61.96	0.03	58.52	1.48	0.60
45	- C.O.	53.73	78.7	18.27	7.38	10.93	900	63.83	0.02	2.21	2.58	0.0
47	25.5	100	7.38	22.2	8 14	35.44	200	20.02	0.33	28.73	0.70	62 13
48	92.58		137	14 69	36.49	168	100	21.12	2	33.44	10.08	181
49	10.98	3.97	35.88	0.03	55.33	4.38	0.05	40.48	72.98	14.02	0.76	506
50	0.01	45.74	9.12	37.89	48.71	15.09	67.12	0.00	0.83	29.45	82.70	0.06
Mean/slide	20,16	24.79	18.72	19.85	27.95	20.49	14.41	20.10	22.19	27.83	19.68	24.84
											AAIA.	

Test item: Dose:	CATECHOL 200 mg/kg/c	CATECHOL 200 mg/kg/day (x2)	Organ:	DUODENUM		1 <sup>st</sup> treatment. 2 <sup>nd</sup> treatment	ند.	25/09/2007 26/09/2007				
N.		6524			6521			6522			6525	
L 1	243 A	243 B	243 C	244 A	244 B	244 C	245 A	245 B	245 C	246 A	246 B	246 C
Code BC-07-14	A1	A2	A3		P2	P3		77	L3	ĺ	E2	E3
File No. BC-07-14	A1.xls	A2.xls	A3.xls	P1.xls	P2.xls	P3.xls	L1.xls	L2.xls	L3.xls	E1.xls	E2.xls	E3.xls
No, of celi		% DNA in tail		1	% UNA In tail			% DNA in tail			% DNA in tail	
-	2.70	1.23	19.53	46.0	24.11	80.79	73.58	67.06	70.85	56.50	0.00	62.18
3 6	20.49	17.13	66.99	79.97	0.32	69.28	69 00	31.86	75.74	21.51	0.55	69.27
.4	1.61	11.78	30.79	57.50	0.80	60.17	24.74	3.49	13.32	19.84	1.36	59.86
2	00.00	15.38	3.91	14.20	9.51	2.93	82.66	19.77	25.66	6.44	74.98	40.74
9	30.00	0.99	42.63	25.01	99.19	59.91	0.05	30.39	70.91	14.89	64.81	43.03
7	74.93	0.37	0.05	31.68	0.95	0.03	36.83	39.23	36.15	1.50	29.64	45.66
x 0	88.80	16.50	3.67	56.00	74.18	39.48	50.97	3.00	36.58	38.92	45.60	3.66
10	26.11	10.64	39.26	1.17	6.04	63.43	177	55.50	1.32	52.00	12.18	10.67
11	82.13	3.07	60.9	50.30	79.92	28.57	99.99	2.28	35.65	1.06	2.09	0.25
12	12.06	0.00	68.31	0.05	97.41	2.67	2.70	44.03	32.75	2.26	5.55	70.26
13	8.39	0.06	37.71	58.03	35.99	94.31	1.85	13.57	10.16	32.19	6.15	14.65
15	20.01	9-6	56.50	0.70	20.03	90.09	71.02	07.70	00.01	0.03	0.01	74.81
15	24.92	35.06	20.0	48.78	7.70	1.09	20.33	16.62	80.08	10.61	31.37	28.86
17	0.00	11.12	51.28	38 77	22.29	000	66.33	14.08	13.91	0.22 25.35	52.84	10.94
18	27.87	12.81	66.95	7.92	2.06	24.17	4.75	2.53	13.24	52.53	9.11	5.01
19	9.04	11.09	1.07	3.99	1.06	51.53	64.45	65.86	23.57	19.88	39.40	32.31
20	4.73	2.54	7.07	19.91	62.88	2.46	52.07	21.43	23,39	36.12	0.00	49.84
21	51.73	97.24	0.13	0.10	0.27	42.83	78.54	45.11	1.58	8.48	1.52	0.08
27	36.90	3.33	0.00	9.07	10.00	0.00	18.13	13.65	0.09	46.54	5.52	13.14
24	0.04	11.43	79.61	26.48	32.05	41.40	31.95	27.7	3.71	0.56	26.12	36.38
25	21.50	4.88	0.00	5.02	5.95	0.19	0.01	16.47	39.43	0.02	28.74	52.34
26	18.05	27.92	11.76	31.48	19.92	11.74	58.97	5.26	23.32	25.26	27.37	30.37
27	41.47	1.71	98.92	7.75	0.00	0.00	65.96	0.12	21.38	23.27	0.76	1.59
288	2.69	0,00	26.92	15.52	35.42	30.38	98.60	12.25	70.73	26.28	0.40	17.35
90	8.25	15.51	32.00 22.01	35.74	35.34	4.06	29.00	2.07	41.20	10.70	76.77	11.7
31	00.0	0.01	48.57	29.26	0.75	37.14	24.35	3.77	47.86	4.50	57.43	41.49
32	6.85	0.12	58.52	0.14	7.39	36.60	9.32	30.02	37.40	36.40	86.09	45.31
33	13.99	1.32	60.36	40.96	17.55	9.01	38.55	21.14	89.44	37.18	0.17	86.55
34	77.38	15.12	0.02	0.39	1.53	3.40	4.13	27.01	61.04	25.44	0.07	41.86
36	40.47	1 44	3.44	70.33	26.34	40.84	17.59	90.04	57.23	4.U5	27.03	8.39
37	21.64	0.02	70.21	16.91	0.52	14.50	62.05	39.29	84.72	33.03	11.70	17.96
38	5.34	51.77	41.39	8.99	0.51	0.83	62.71	76.62	41.11	0.00	10.52	41.60
39	74.75	45.62	19.91	58.83	36.40	2.70	17.54	00.69	0.09	80.33	13.63	62.64
40	24.34	43.60	25.90	05.1	2.70	10.97	72.69	39.13	75.74	26.62	12.57	78.48
40	35.18	9 28	1.29	11.47	534	35.20	56 94	51.34	32.05	28.19	3.58	17.77
43	22.64	31.85	13.82	3.94	80.12	30.05	14.90	2.38	10.00	73.88	23.77	12.25
44	76.61	41.42	13.84	20.41	5.67	0.55	42.35	8.31	13.54	14.50	8.61	30.93
45	85.44	1.43	13.53	15.40	4.06	7.45	20.25	39.05	29.41	62.74	0.45	65.78
40	43.01	0.07	0.00	16.75	2.40	27.5	4.43	27.95	21.34	68.59	6.52	28.19
44	28.62	0.00	0.28	7.88	1.94	17.90	2 0.05	68.38	50.08	47.07	29.94	16.24
49	82.23	21.55	7.06	18.84	0.70	1.58	74.64	77.50	29.31	6.83	31.31	15.54
20	5.26	0.32	3.65	61.38	7.43	20.61	1.72	7.14	40.60	13.18	47.84	73.57
Mean/slide	29.03	12.87	25.71	24.02	20.86	24.76	39.04	27.09	35.12	30.06	20.65	33.51
Mean/animal		22.54			23.21			33.75			28.07	
Mean/dose						76.89	88			Ė		

nest item. Dose:	100 ma/ka/dav (x/	lav (x2)	: :			2nd treatment	. •	26/09/2007				
Animal N°		6527			6529			6526			6530	
Slide No. BC-07-	247 A	247 B	247 C	248 A	248 B	248 C	249 A	249 B	249 C	250 A	250 B	250 C
Code BC-07-14	G1	<b>G</b> 2	63	ī	12	13	R1	R2	R3	B1	B2	B3
File No. BC-07-14	G1.xls	G2.xls	G3.xls	I1.xls	I2.xls	l3.xds	R1.xls	R2.xls	R3.xls	B1.xls	B2.xls	B3.xls
No. of cell		% DNA in tai	LI		% DNA in tail	LI		% DNA in tail			% DNA in tai	
- 4		73.15	51.60	77.07	7.06	44.01	40.61	29.04	21.21	14.37	62.87	8.19
7 6	/6.33 86.29	50.37	36.67	88.34	93.97	9.52	36.65	0.00	46.39	87.91	30.38	45.62 24.58
4	9.11	27.33	34.42	5.26	59.87	8.19	16.70	13.50	17.71	2.16	52.44	8.80
5	62.39	10.72	16.33	35.92	84.84	54.66	85.43	0.22	64.40	17.17	1.95	0.00
9	86.69	7.74	55.36	13,67	1.76	0.02	43.86	93.14	1.15	64.71	84.55	16.56
_	7.67	86.45	34.14	68.70	11.08	56.80	1.03	76.24	2.86	4.20	39.75	90.97
0	55.76	20.92	55.15	71.62	25.88	90.31	22.23	3 13	20.34	76.47	53.52	77.78
10,	81.66	13.78	44.01	12.68	27.06	5.12	82.19	5.12	1.26	1932	25.85	56.56
11	71.86	42.21	5.30	8.89	13.46	3.84	12.78	4.53	6.18	12.97	1.98	27.02
12	82.54	62.39	24.20	19.95	50.11	12.35	44.36	23.86	15.07	76.25	5.56	53.65
13	68.65	67.93	41.29	79.43	87.12	16.17	73.85	23.72	2.98	0.01	32.68	33.59
4 4	79.80	10.36	74.88	87.15	0.05	45.50	31.92	35.21	0.03	18.24	17.51	0.79
16	54.77	29.35	54.39	23.99	23.19	44	47.72	1.86	40.80	25.44	17.85	21.88
17	26.04	27.86	4.49	42.41	2.21	36.73	40.50	53.75	6.71	51.34	20.25	14.80
18	39.92	48.03	14.59	1.46	73.07	0.24	29.99	37.54	0.27	0.56	32.19	35.49
19	19.13	94.25	4.11	4.69	72.96	82.55	42.36	0.02	34.01	1.82	18.47	0.00
20	43.00	01.10	33.00	23.20	27.50	40.04	49.49	26.03	13.62	28.56	12.05	30.94
22	86.68	81.99	22.72	83.30	60.76	54.59	53.41	31.52	14.39	0.20	6.37	37.39
23	78.94	0.35	89.27	9.01	73.77	33.45	14.88	5.78	16.41	24.91	39.18	33,57
24	40.18	74.06	86.49	75.55	2.81	18.77	74.44	22.85	33.95	64.61	46.81	1.85
25	71.86	0.4/	17.22	8.74	47.04	80.93	0.00	30.27	19.46	0.13	9.73	2.24
07	40.82	30.07	71.36	14.24	5000	78.03	3.30	59.15	15.33	29.64	46.45	16.37
28	17.18	15.84	0.71	73.52	000	0.02	5192	1.55	29.28	7.57	16 97	0.23
29	23.46	51.97	13.75	7.94	0.00	29.28	45.94	26,82	9.58	0.44	41.17	9.75
30	61.56	96.0	3.96	83.94	20.17	28.95	64.74	62.89	10.83	42.25	19.16	22.54
34	17.55	1.78	19.54	58.93	80.22	0.25	2.80	14.12	4.00	0.38	12.62	3.40
32	0/0	18.17	70.24	47.79	19.70	53.25	23.84	3.16	18.32	4.59	4.67	26.92
34	17.05	500	14.08	44.05	100	32.46	46.04	4.42	0.04	20.43	0.80	20.00 40 56
35	6.26	24.90	49.45	53.41	0.47	0.14	39.65	5,39	52.77	3.49	13.68	24.79
36	63.17	55.90	54.66	2.24	35.25	1.58	19.74	52.81	11.55	0.00	0.00	5.04
37	16.72	72.34	61.12	50.79	5.72	85.86	3.40	30.26	7.75	34.37	17.02	0.22
30	70.42	54.24	22.18	27.00	5.63	02.88	1.30	25.50	24.55	0.88	13.71	49.75
640	16.59	84 16	23.74	61.00	44 04	58 95	50.02	63.20	12.42	10.00	0.00	10.43
41	0.66	86.08	0.00	24.72	71.30	26.41	6.08	42.79	14.53	0.46	0.15	5.04
42	69.79	32.82	83.04	70.72	37.06	0.16	28.59	0.00	21.30	53.63	0.00	1.39
63	81.46	14.19	21.88	64.52	70.11	81.32	22.58	0.22	0.02	51.52	3.67	28.85
45	11 83	0.02	6.43	28.86	10.24	0.90	41.0	23.86	T.U8	38.50	0.38	20.02
46	38.22	36.93	0.00	72.14	35.90	61.59	20.63	2.56	0.93	13.28	22.98	21.04
47	0.11	22.35	52.20	16.79	1.16	89.77	0.30	38.69	5.64	44.74	6.71	30.08
48	85.14	15.76	23.02	22.11	27.24	36.48	29.83	0.48	4.01	8.12	60.32	13.23
94.0	14.87		13.44	38.69	4.4/ 52.81	74.42	3.55	1.12	0.96	15.74	4.09	30.92
Maan/elida	40 M3	38 27	27.25	VS & V	34.05	28.47				32.40	26,33	200.55
Mondanian	70.00		24.00	40.00	20.5	†	24.62	10.12		66,12	20.U3	43.30
Mexical line.									•		2, פנ	

Single Decry.   236A   236C   237	Anımal N°	9	6535			6537			6538	
1.1	lide No. BC-07-	236 A	236 B	236 C	237 A	237 B	237 C	238 A	238 B	238 C
1,144   1,2,45   1,3,45   1,43   1,3,45   1,43   1,2,45   1,43   1,2,45   1,43   1,43   1,44   1,43   1,44   1,4	ode BC-07-14	JJ	J2	J3		F2			22	ප
7.3.50         % DNA in tail         % DNA in tail </td <td>ile No. BC-07-14</td> <td>J1.xls</td> <td>J2.xls</td> <td>J3.xls</td> <td></td> <td>F2.xls</td> <td></td> <td></td> <td>C2.xls</td> <td>C3.xfs</td>	ile No. BC-07-14	J1.xls	J2.xls	J3.xls		F2.xls			C2.xls	C3.xfs
66.97         66.74         45.97         88.60         16.72         75.71         33.34         40.04         52.66         46.41         45.97         46.97 <th< td=""><td>o, of cell</td><td></td><td>DNA in</td><td></td><td>1</td><td>% DNA in tail</td><td></td><td>l</td><td>% DNA in tail</td><td></td></th<>	o, of cell		DNA in		1	% DNA in tail		l	% DNA in tail	
17.00   17.0		73.50	67.34	45.91	09.68	16.72	75.31		52.66	69.14
67.2.1         67.2.2<	7	66.03 56.07	35.18	70.07	87.12	13.77	33.24	74.01 90 55	21.40	4.72
27.00         47.00         66.04         66.94         74.01         76.79         66.97         66.97           27.00         42.26         66.04         66.94         17.01         76.70         66.97         66.97         77.02           27.00         41.66         26.97         47.04 </td <td>4</td> <td>74.22</td> <td>40.95</td> <td>6.85</td> <td>49.44</td> <td>44 13</td> <td>217</td> <td>54 94</td> <td>10.10</td> <td>15 90</td>	4	74.22	40.95	6.85	49.44	44 13	217	54 94	10.10	15 90
2.0.00         4.2.28         55.73         1.7.21         7.1.73         7.1.73         7.1.73         7.1.74         7.1.75         7.1.75         7.2.74         7.2.75 </td <td>. vo</td> <td>95.72</td> <td>37.68</td> <td>66.04</td> <td>59.98</td> <td>74.01</td> <td>76.29</td> <td>56.97</td> <td>84.77</td> <td>44.59</td>	. vo	95.72	37.68	66.04	59.98	74.01	76.29	56.97	84.77	44.59
86 67         11.85         28.50         43.64         42.58         55.01         85.19         37.88           72.58         77.58         44.03         55.01         55.01         65.24         7.38           72.58         77.64         11.85         28.00         72.79         55.30         65.30         7.12           72.58         77.64         39.83         33.11         77.32         45.04         25.24         1.52         1.12           37.04         39.83         37.11         32.75         27.29         31.2         26.24         1.72         1.12         28.75         1.12         28.75         1.12         28.75         1.12         28.75         1.12         28.75         1.12         28.75         1.12         28.75         1.12         31.12         1.12         31.12         1.12         31.12         1.12         31.12         1.12         31.12         31.12         1.12         31.12         1.12         31.12         1.12         31.12         1.12         31.14         31.14         31.14         31.14         31.14         31.14         31.14         31.14         31.14         31.14         31.14         31.14         31.14         31.14	9	27.00	42.28	55.73	17.21	17.73	76.18	23.71	25.74	29.10
26.80         7.10         6.3.0         5.10         7.2.7         7.2.9         7.1.7         7.1.2         7.1.2         7.1.2         7.1.2         7.1.2         7.1.2         7.1.2         7.1.2         7.1.3         7.2.7         7	_	88.67	11.85	28.50	43.64	25.82	55.01	85.19	37.88	70.23
4183         7110         394         527         623         5240         44.53           4183         7110         394         1394         830         90.58         27.13         28.75         14.53	20 0	77.56	1.12	63.05	41.85	44.03	35.97	65.32	7.35	0.00
4531         4153         613         36.32         45.53         56.13         45.10         17.2           4531         4153         45.74         45.04         25.44         15.34         17.73           727.04         33.87         39.41         32.75         35.34         17.73         35.30         45.57         25.34         17.73           12.04         33.47         39.41         32.75         36.30         45.57         25.42         16.73           12.05         25.21         92.28         65.33         21.729         31.7         25.43         11.77           88.37         26.79         66.27         27.29         16.80         16.80         11.7         11.7           88.37         26.79         66.27         27.53         3.86         16.80         11.7         11.7           88.37         26.79         66.75         17.7         66.85         17.8         67.7         11.7           88.37         27.89         38.64         16.30         8.65         17.83         11.7           88.37         27.89         38.64         16.32         27.76         18.76         18.76           88.99         18.99	901	41.83	76.42	13.04	28,00	97.79	92.30	32.40 28.75	44.23	34.09
37.04         39.83         33.11         77.33         45.04         25.54         15.34         177.3           12.02         25.21         29.29         32.75         32.75         27.29         45.57         12.27         28.91           12.02         25.21         92.92         55.33         27.29         31.2         27.29         45.57         12.57         38.93           33.37         47.52         48.60         68.76         16.74         68.67         12.77         38.75         12.07         12.57         38.93         12.07         12.50         12.07         12.50         12.07         12.50         12.07         12.50         12.07         12.50         12.07         12.50         12.07         12.50         12.50         12.07         12.50	1	43.31	47.63	8 73	36.32	45.53	50.13	43.10	7 13	70.07
72.12         33.47         39.41         32.75         35.30         45.57         25.24         36.91           72.12         33.47         39.41         32.75         35.30         45.57         15.24         36.91           83.13         45.20         46.50         81.20         21.17         8.44         66.75         67.13           83.17         45.20         46.20         61.20         21.17         69.85         11.72           83.17         45.20         46.80         61.20         10.74         69.85         11.72           83.17         26.74         46.20         87.86         16.30         86.85         40.40         22.86           84.62         46.20         87.86         16.30         86.85         40.40         22.86           84.62         46.20         87.00         87.00         87.00         87.00         87.00         87.00           86.96         46.76         86.97         87.00         87.00         87.00         87.00         87.00           86.97         86.90         87.00         87.00         87.00         87.00         87.00         87.00           86.92         86.92         86.00	12	37.04	39.83	33,11	77.33	45.04	25.54	15.34	17.73	58.45
12.62         25.21         42.92         55.33         27.29         3.12         11.27         93.75           33.31         63.23         21.11         8.44         65.75         67.13         67.13           88.37         47.52         46.80         66.75         67.50         16.73         67.13           88.37         47.52         46.80         66.72         97.65         16.73         67.13           88.37         47.52         46.80         66.82         76.43         16.83         20.07         23.06           96.89         30.46         17.16         76.82         20.07         23.76         26.75         17.15           26.89         17.16         76.80         17.16         76.82         20.07         23.16         17.16         76.81         16.56         16.37         23.16         17.16         17.16         17.16         17.16         17.16         17.16         17.16         17.14         17.16         17.14         17.14         17.14         17.14         17.14         17.14         17.14         17.14         17.14         17.14         17.14         17.14         17.14         17.14         17.14         17.14         17.14         17	13	72.12	33.47	39.41	32.75	35,30	45.57	25.24	26.91	4.83
88.3.71         88.3.31         41.50         66.75         15.86         15.84         66.75         11.72           88.3.72         48.53         44.50         66.75         15.86         16.74         66.75         11.77           88.3.72         26.79         66.27         87.95         10.74         66.85         11.207           88.3.72         26.79         66.27         87.95         10.74         66.85         11.207           84.50         4.50         46.89         10.74         26.80         11.207         11.207           84.50         4.50         4.50         27.87         27.35         27.86         10.64         20.67         17.87           80.92         40.09         86.10         40.00         40.32         46.68         19.84         66.75         10.77         10.77         10.84         10.67         10.77         10.84         10.67         10.77         10.84         10.67         10.77         10.84         10.84         10.84         10.84         10.84         10.84         10.84         10.84         10.84         10.84         10.84         10.84         10.84         10.84         10.84         10.84         10.84         10.84	14	12.62	25.21	92.92	55.33	27.29	3.12	11.27	38.75	19.16
89.37         47.22         48.80         98.70         15.85         19.47         26.13         11.72           34.62         47.22         26.79         66.23         27.36         10.30         8.65         40.40         29.89           34.62         4.52         38.64         16.30         8.65         40.40         29.89           34.62         4.52         32.76         26.75         12.57         20.07         20.14           54.56         4.52         27.36         20.07         20.07         20.07         20.07           95.76         22.73         36.75         22.44         2.86         10.65         20.07         20.07           26.86         15.76         24.27         27.32         46.68         19.84         23.59         20.16         20.07         20.16         20.07         20.16         20.07         20.16         20.07         20.16         20.07         20.16         20.07         20.16         20.07         20.16         20.07         20.16         20.07         20.16         20.07         20.16         20.07         20.16         20.07         20.16         20.07         20.16         20.07         20.16         20.07         20.16<	15	33.31	83.33	41.50	81.23	21.11	8.44	65.75	67.13	33.14
44.62         1.0.74         0.9.62         1.0.74         0.9.62         1.0.74         0.9.62         1.0.74         0.9.62         1.0.74         0.9.62         1.0.74         0.9.62         1.0.74         0.9.62         1.0.74         0.9.62         1.0.74         0.9.62         1.0.75         0.9.62         1.0.75         0.9.62         1.0.62         0.0.62         1.0.62         0.0.62         1.0.62         0.0.62         1.0.62         0.0.62         1.0.62         0.0.62         1.0.62         0.0.62         1.0.62         0.0.62         1.0.62         0.0.62         1.0.62         0.0.62         1.0.62         0.0.62         1.0.62         0.0.62         0.0.62         1.0.62         0.0.62 </td <td>16</td> <td>88.37</td> <td>47.52</td> <td>48.80</td> <td>69.76</td> <td>15.85</td> <td>79.47</td> <td>26.13</td> <td>11.72</td> <td>22.07</td>	16	88.37	47.52	48.80	69.76	15.85	79.47	26.13	11.72	22.07
54.56         4.52         48.91         32.87         60.25         42.05	2,0	34.62	11.37	14.50	28.78	10.74	09.80	18.38	12.07	84.41
96.99         30.45         17.16         65.32         27.35         3.26         20.07         23.14           96.99         40.09         86.1         55.45         17.35         32.6         20.07         23.14           36.75         29.44         21.00         40.00         93.05         87.19         36.41         8.33           26.98         15.76         21.93         24.27         23.13         17.53         55.36         20.07         23.14           26.98         15.76         26.40         91.00         40.00         93.05         86.41         8.33         21.16         83.36         116.73         36.41         8.35         21.16         83.36         26.16         19.44         23.59         20.07         23.14         83.59         20.07         23.14         83.59         20.07         23.14         23.59         20.07         23.14         23.59         20.07         23.14         23.59         20.07         23.14         23.59         20.07         23.14         23.59         23.14         23.59         23.14         23.59         24.14         83.39         23.27         65.83         27.16         20.07         27.14         20.01         20.07         <	0	54.56	4.52	48 91	32.87	60.30	13.63	20.52	1 25	54.08
90.92         40.09         86.61         55.45         15.22         32.76         25.75         16.73           26.78         19.00         40.02         46.88         19.84         23.59         23.59           26.78         15.76         11.83         44.00         30.02         46.88         19.84         23.59           26.73         17.12         17.53         55.36         27.16         23.59         27.16           27.38         60.22         69.33         77.12         78.41         8.35         27.46           45.39         34.22         65.34         43.26         5.03         36.01         29.31         17.50           45.39         34.22         12.56         86.02         32.03         37.36         16.56         54.49           45.39         34.22         12.56         86.02         39.97         74.19         75.01         40.56           45.39         6.84         0.72         12.84         47.49         47.49         47.49         47.16         47.49         47.16         47.49         47.16         47.14         46.19         17.35         14.48         88.74         85.94         2.85.79         47.16         25.22	202	95.99	30.45	17.16	65.32	27.35	3.76	20.02	23.14	78.20
35.75         29.44         2160         91.00         40.32         46.68         19.84         23.59           29.78         15.76         11.93         24.00         39.05         87.19         36.41         8.33           29.73         15.76         16.81         24.27         23.17         17.53         36.41         8.33           21.38         64.76         36.40         56.93         77.12         76.49         24.69         24.49           21.38         64.76         36.20         43.26         5.03         38.07         79.61         12.05           93.59         34.22         5.83         37.36         16.56         54.49         12.05           45.97         66.51         6.86         34.03         32.22         5.83         37.36         16.56           41.16         71.49         6.89         34.03         32.22         5.83         76.17         140.09           41.16         71.49         6.89         34.03         32.22         5.83         76.14         40.09           41.16         71.48         6.25         74.49         77.40         6.96         76.49         76.17         14.09           40.24	21	90.92	40.09	86,61	55.45	15.22	32.76	25.75	16.73	78.44
26.89         15.76         11.93         24.40         93.05         87.19         36.41         8.33           20.73         83.28         64.76         56.31         77.12         77.15         56.36         21.16           21.38         64.75         36.40         56.32         77.12         77.15         54.59         54.16           21.38         64.75         36.40         56.32         77.12         78.41         54.59         54.69           95.50         31.82         66.51         65.81         61.25         58.3         37.36         16.56           46.59         36.50         31.22         58.3         37.36         16.56         16.09           41.16         71.49         61.99         36.02         20.14         90.9         16.09           41.16         71.24         61.99         36.97         73.35         16.09         16.09           41.16         71.14         74.14         75.01         40.09         73.35         16.09         16.09           41.16         71.14         74.14         74.14         75.01         40.09         17.14         16.09         17.14         17.09         17.14         17.09	22	35.75	29.44	21.60	91.00	40.32	46.68	19.84	23.59	73.66
21.36         63.28         24.27         7.31.3         17.53         55.36         21.16           21.38         64.75         26.00         59.33         77.12         17.16         54.39         54.49           17.16         75.59         60.22         63.29         3.27         69.01         29.31         12.05           45.39         31.82         60.22         63.29         3.27         69.01         29.31         12.05           45.39         34.22         12.55         86.02         39.97         74.19         75.01         40.09           45.97         66.19         47.26         63.99         74.19         75.01         40.09           52.4         66.24         86.02         39.97         74.19         75.01         40.09           36.91         86.94         67.19         96.4         67.49         73.35         78.25           46.94         74.11         48.19         47.6         39.02         29.60         45.26           50.23         19.64         74.19         47.6         39.72         29.60         46.79           50.24         25.22         10.84         17.10         47.80         25.22 <t< td=""><td>23</td><td>26.98</td><td>15.76</td><td>11.93</td><td>44.00</td><td>93.05</td><td>87.19</td><td>36.41</td><td>8.33</td><td>63.79</td></t<>	23	26.98	15.76	11.93	44.00	93.05	87.19	36.41	8.33	63.79
17.13         76.75         30.40         39.43         37.71         66.01         24.59         54.49           93.59         31.82         89.46         43.26         5.03         38.07         79.61         32.56           45.39         60.22         12.56         60.22         39.97         74.19         75.01         40.09           46.39         34.25         12.56         86.02         39.97         74.19         75.01         40.09           46.39         34.03         34.03         36.07         76.01         40.09         14.90           36.14         6.84         0.72         12.84         65.99         73.35         78.20           6.24         86.29         74.41         48.19         18.70         35.22         20.17         40.09           6.24         86.29         74.41         48.19         18.70         35.22         35.79         43.76           6.24         86.29         74.41         48.19         18.70         35.22         36.90         73.56         18.43         44.80         86.72         43.76         43.76         43.76         43.76         43.76         43.76         43.76         43.76         43.76	24	29.73	83.28	29.81	24.27	23.13	17.53	52.36	21.16	82.42
93.59         31.29         90.22         5.21         38.01         7.93.31         1.2.05           45.97         66.51         66.81         61.53         32.22         5.83         37.36         16.56           45.97         66.51         65.81         61.52         32.22         5.83         37.36         16.56           45.97         66.51         65.81         61.25         36.02         32.22         5.83         37.36         16.56           41.16         71.49         6.89         34.03         9.64         67.49         20.17         14.00           41.16         71.40         6.72         12.84         56.59         73.55         78.25           6.24         86.42         74.48         17.13         4.06         37.23         35.79         43.76           6.24         84.44         75.10         18.70         37.23         35.79         43.76           6.24         84.44         75.10         18.70         37.23         35.79         43.76           19.47         86.28         74.44         48.19         18.70         37.23         35.79         43.76           19.42         18.70         18.44         4	27	17.18	26.73	35.40	59.33	21.77	(8.41	54.59	54.49	22.87
45.97         66.57         65.81         61.22         5.83         37.36         16.56           45.39         34.22         12.55         86.02         39.97         74.19         75.01         40.09           41.10         71.42         12.55         86.02         39.97         74.19         75.01         40.09           41.10         71.25         10.84         0.72         12.84         65.59         73.35         78.22           50.21         86.82         34.03         9.64         67.69         73.35         78.23           19.47         86.82         17.13         4.06         33.02         29.60         43.76           50.22         19.64         75.10         6.19         4.06         25.22         0.14         9.03           73.78         69.14         25.65         18.43         44.48         88.74         55.93         61.49           74.5         25.65         18.43         44.48         88.74         55.93         61.49           73.78         69.14         5.76         25.22         0.14         9.03           74.5         5.56         14.79         65.91         57.4         48.69	26	03.50	31.82	80.46	03.29	5.27	29.01	29.31	20.27	33.14
45.39         34.22         12.55         96.02         39.97         74.19         75.01         40.09           44.16         71.49         6.98         34.03         9.64         66.59         73.35         14.90           36.91         86.81         0.72         12.84         67.89         29.60         85.22         78.42           19.47         86.29         17.31         4.06         39.02         29.60         85.22           19.47         86.29         77.10         4.06         39.02         29.60         85.22           19.47         86.29         74.48         18.7         25.22         0.14         9.03           30.88         74.43         55.65         18.43         44.48         88.74         55.94         2.85           73.78         69.16         9.52         79.55         8.18         55.94         1.85           74.5         55.24         35.40         16.19         44.48         88.74         55.94         2.85           74.5         55.54         27.84         44.48         88.74         55.94         4.46         14.46         14.69         14.69         14.69         14.69         14.69         14.69	28	45.97	66.51	65.81	61.53	32.22	583	37.36	16.56	71.40
41.16         71.49         6.98         34.03         9.64         67.49         20.17         14.90           36.91         86.82         10.84         0.72         12.84         56.59         73.35         78.42           6.24         84.44         17.13         4.06         39.02         29.60         85.23           19.47         86.29         73.35         78.42         87.6         85.73         43.76           50.23         19.64         75.10         48.19         18.70         37.22         29.60         85.73           50.23         19.64         75.10         48.19         18.70         37.22         29.60         85.73           39.88         74.41         48.19         18.70         37.22         0.14         30.3           70.28         19.64         77.74         86.51         8.18         25.94         2.85           74.5         55.24         35.98         58.39         10.33         24.74         37.4         44.69           74.5         55.24         35.98         58.39         10.33         24.74         20.21         12.45           45.11         46.02         17.28         65.96         80.71<	29	45,39	34.22	12.55	86.02	39.97	74.19	75.01	40.09	15.86
36.91         86.82         10.84         0.72         12.84         56.59         73.35         78.42           6.24         86.43         74.48         17.13         4.06         39.02         29.60         85.23           19.47         86.28         74.41         48.19         18.70         37.23         29.60         85.23           30.88         74.43         6.19         5.76         25.22         0.14         9.03           73.78         69.16         65.26         9.52         76.56         8.18         23.63         61.49           74.5         27.87         8.63         65.91         65.91         55.44         23.63         61.49           74.5         27.88         67.19         65.91         65.91         65.91         16.11         16.11           74.5         27.84         17.33         24.74         29.21         12.45         16.11           6.46         21.20         11.30         33.84         38.64         47.44         16.81         47.44         16.81         47.44         16.81         47.44         16.81         47.44         16.81         47.44         16.81         47.44         16.14         47.44 <td< td=""><td>30</td><td>41.16</td><td>71.49</td><td>6.98</td><td>34.03</td><td>9.64</td><td>67.49</td><td>20.17</td><td>14.90</td><td>37.83</td></td<>	30	41.16	71.49	6.98	34.03	9.64	67.49	20.17	14.90	37.83
6.24         84.44         24.88         17.13         4.06         339.02         29.60         65.23           50.23         19.64         75.10         6.19         18.70         37.22         29.60         43.76           50.23         19.64         75.10         6.19         18.70         25.22         0.14         9.03           50.23         19.64         74.51         6.19         4.48         88.74         5.594         2.85           73.78         69.16         9.52         79.55         8.18         55.94         2.86           74.5         55.24         25.06         14.79         65.91         5.74         25.93         61.49           74.5         55.24         27.84         67.19         36.70         76.70         35.46         16.19           74.5         55.24         35.86         58.39         10.33         24.74         29.51         12.45           44.51         46.02         30.14         15.34         6.45         27.64         40.51         47.69           45.6         21.29         75.28         65.96         80.71         27.44         40.51         47.24           6.4         21.29	31	36.91	86.82	10.84	0.72	12.84	56.59	73.35	78.42	64.04
19.47         186.29         74.41         48.19         18.70         37.23         35.79         43.76           50.23         18.64         75.65         18.43         44.48         88.74         55.94         2.86           39.88         74.43         55.65         18.43         44.48         88.74         55.94         2.86           39.88         74.43         55.24         35.40         16.11         46.09         16.11           74.5         27.87         27.88         67.19         36.70         76.70         37.16         44.69           74.5         27.87         27.88         67.19         36.70         76.70         37.16         44.69           74.5         25.24         35.89         67.19         36.70         76.70         37.16         44.69           45.11         46.02         30.14         15.34         6.45         27.74         45.74         45.6           45.11         46.12         33.84         33.87         47.24         40.51         47.4           45.11         46.12         17.24         44.42         38.6         47.14         40.51         47.24           45.08         23.74         4	32	6.24	84.44	24.88	17.13	4.06	39.02	29.60	85.23	72.06
50.23         19.64         75.10         6.19         5.76         25.27         0.14         9.03           39.88         74.43         65.65         9.52         76.55         8.18         25.94         2.85           73.78         69.16         62.28         9.52         79.55         8.18         23.93         61.49           74.55         29.08         35.42         14.79         65.91         5.74         35.40         16.11           74.55         27.87         35.42         14.79         65.91         77.0         35.40         16.11           74.5         27.87         36.98         68.39         10.33         24.74         29.21         12.45           64.6         21.29         31.14         15.34         8.45         27.74         45.74         47.4           64.6         21.20         75.28         65.96         80.71         46.89         42.15         47.4           45.08         23.07         17.24         84.61         0.61         16.1         54.20           45.09         23.07         23.98         37.90         56.28         12.91         42.94           45.09         23.44         26.97	33	19.47	86.29	74.41	48.19	18.70	37.23	35.79	43.76	48.68
3.78         69.16         50.50         108.43         74.48         86.14         50.94         2.85           73.78         69.16         69.28         9.52         79.58         86.44         50.94         2.85           8.64         29.06         35.42         14.79         65.91         5.74         35.40         16.19           7.45         27.87         27.78         67.19         36.70         77.76         44.69           7.45         55.24         35.88         58.39         10.33         24.74         39.71         44.69           4.6         6.46         21.20         75.28         68.39         80.71         45.87         44.69           69.96         62.120         75.28         65.96         80.71         45.87         45.87           69.96         62.120         75.28         65.96         80.71         45.87         45.87           69.96         62.10         23.74         46.89         42.16         44.20           45.08         23.04         47.44         47.44         47.44         47.44           46.09         65.00         38.37         23.44         40.51         42.14           46.4<	\$ 5	50.23	19.64	75.10	6.19	5.76	25.22	0.14	9.03	52.25
8.64         29.08         35.42         14.79         65.51         5.74         35.40         16.19           7.45         25.84         27.18         67.19         36.70         76.70         37.16         44.69           7.45         55.24         27.88         67.19         36.70         76.70         37.16         44.69           45.11         46.02         30.14         15.34         6.45         27.64         40.51         47.66           45.11         46.02         30.14         15.34         6.45         27.64         40.51         47.46           6.46         21.29         11.30         53.84         33.86         40.51         47.87         67.87           66.46         62.12         65.50         71.24         46.89         42.16         44.20           69.40         62.20         77.28         80.14         46.89         38.16         39.71           46.50         23.04         23.37         23.98         37.78         42.94         42.94           16.76         42.64         25.28         40.66         69.50         14.3         42.94           16.54         26.97         7.97         27.93         36	30	39.88	60.45	22.65	18,43	44.48	88./4	25.94	2.85	81.84
74,25         27,87         27,88         67,19         36,70         76,70         37,40         44,69           74,5         25,24         35,98         58,39         10,33         24,74         29,21         12,46           45,11         46,02         30,14         16,34         6,46         27,64         40,51         44,69           64,6         21,20         11,30         33,84         33,86         33,64         45,17           69,96         62,20         75,28         65,96         80,71         46,89         42,15         44,20           69,96         62,20         75,28         65,96         80,71         46,89         42,15         44,20           45,08         23,04         29,78         61,24         84,61         0.61         16,61         54,21           45,08         23,04         29,78         61,24         0.61         16,61         54,24           45,08         23,04         25,18         49,16         31,47         29,26         12,91           25,44         26,86         52,88         49,16         31,47         29,26         27,93           25,44         26,86         52,88         30,56 <t< td=""><td>37</td><td>0.70</td><td>20.00</td><td>35.42</td><td>14.70</td><td>79.33</td><td>0.0</td><td>25.93</td><td>94.14</td><td>89.03</td></t<>	37	0.70	20.00	35.42	14.70	79.33	0.0	25.93	94.14	89.03
745         55.24         35.96         58.39         10.33         24.74         29.21         12.45           44.11         21.29         30.14         15.34         6.45         27.74         40.51         4.74           64.6         21.20         11.30         33.84         33.86         40.51         4.74           69.96         62.20         75.28         65.96         80.71         46.89         42.15         44.20           45.08         23.04         25.52         71.24         14.24         36.19         38.16         54.21           45.08         23.04         25.78         61.24         84.61         0.61         16.01         42.94           45.09         28.37         23.98         37.90         56.28         12.91         42.94           25.44         26.86         55.15         40.66         89.01         78.30         14.30           25.44         26.87         7.89         36.65         7.89         36.45         14.35           25.97         7.97         36.05         27.30         27.30         36.45           12.59         7.97         48.89         30.56         48.30         14.49 <t< td=""><td>38</td><td>74.25</td><td>27.87</td><td>27.88</td><td>67.19</td><td>36.70</td><td>76.70</td><td>37.16</td><td>44.60</td><td>15.76</td></t<>	38	74.25	27.87	27.88	67.19	36.70	76.70	37.16	44.60	15.76
45.11         46.02         30.14         15.34         6.45         27.64         40.51         4.74           6.46         21.29         71.30         35.84         33.86         23.67         17.03         45.87           63.96         62.20         71.24         86.59         80.71         77.03         45.87           45.08         23.04         23.78         65.90         38.16         39.71           65.09         23.04         23.98         67.90         56.28         12.91         42.91           18.76         14.90         49.64         55.15         40.66         89.01         79.30           25.44         26.88         7.97         33.37         55.97         77.89         25.30         10.91         42.94           12.59         7.97         33.37         55.97         77.89         25.30         27.93         36.45           12.49         42.73         83.87         91.15         36.05         27.33         36.45           12.14         34.36         45.89         30.56         48.33         11.49         72.88         89.14           46.64         44.17         43.48         49.08         37.78 <t< td=""><td>39</td><td>7.45</td><td>55.24</td><td>35,98</td><td>58.39</td><td>10.33</td><td>24.74</td><td>29.21</td><td>12.45</td><td>3.03</td></t<>	39	7.45	55.24	35,98	58.39	10.33	24.74	29.21	12.45	3.03
6.46         21.29         11.30         33.84         33.86         33.67         17.03         45.87           69.96         62.20         75.28         65.96         80.71         46.89         42.15         44.20           45.08         23.04         29.78         61.24         84.61         0.61         16.61         54.21           45.08         23.04         29.78         61.24         84.61         0.61         16.61         54.21           16.76         14.90         49.64         55.15         40.66         69.50         11.47         29.24           25.44         26.86         52.88         49.16         31.41         35.33         11.47         29.26           12.59         7.97         33.37         55.97         77.89         25.30         11.47         29.26           12.14         34.36         45.89         30.66         48.33         11.49         27.88         89.14           46.64         44.17         43.48         49.08         37.78         41.03         39.11         31.16	40	45.11	46.02	30.14	15.34	6.45	27.64	40.51	4.74	77.05
68.95         42.15         42.15         44.20           34.35         47.24         75.28         65.96         80.71         46.89         42.15         44.20           45.08         47.24         56.52         71.24         14.24         56.19         38.16         39.71           45.08         23.04         29.78         61.24         84.61         0.61         16.61         54.21           18.76         16.80         38.37         23.98         37.90         59.28         12.91         42.94           26.44         26.86         52.88         49.66         31.41         36.30         11.47         29.26           12.59         7.97         33.37         55.97         77.89         25.30         27.93         36.45           12.14         34.36         45.89         30.66         48.33         11.49         72.88         89.14           46.64         44.17         43.48         49.06         37.78         41.03         39.11         31.16	41	6.46	21.29	11.30	33.84	33.86	33.67	17.03	45.87	76.40
45.08         23.04         29.78         11.24         14.24         30.11         38.16         38.17           45.08         23.04         29.78         61.24         84.61         16.61         54.21           95.75         65.09         38.37         23.98         37.90         56.28         12.91         42.94           25.44         26.86         52.88         49.64         55.15         40.66         89.50         14.37         29.26           12.59         7.97         33.37         55.97         77.89         25.30         27.93         36.45           12.14         34.36         45.89         30.16         48.36         24.12         8.30         14.43           46.64         44.17         43.48         49.06         37.78         41.03         39.11         31.16	42	69.96	62.20	/5.28	65.96	80.71	46.89	42.15	44.20	2.34
95.75         65.09         38.37         23.38         37.30         56.28         12.91         47.21           18.76         14.90         49.64         55.15         40.66         69.28         12.91         42.94           25.44         26.86         49.64         55.15         40.66         69.50         90.1         70.30           12.59         7.97         38.37         55.97         77.89         25.30         27.93         36.45           12.59         7.97         83.67         91.15         36.05         27.39         36.45           12.49         42.73         83.67         91.15         36.05         24.12         83.30         1.43           46.64         44.17         43.48         49.06         37.78         41.03         39.11         31.16	2 4	45.08	23.04	20.00	61.24	84.24	20.19	38.10	54.54	4.02
18.76         14.90         49.64         55.15         40.66         69.50         99.01         79.30           25.44         26.86         52.88         49.16         31.41         35.93         11.47         29.26           12.59         7.97         33.37         55.97         77.89         25.30         27.93         36.45           14.95         42.73         83.67         91.15         36.05         24.12         8.30         14.45           12.14         34.36         45.89         30.56         48.33         11.49         72.96         89.14           46.64         44.17         43.48         49.08         37.78         41.03         39.11         31.16	45	95.75	65.03	38.37	23.98	37.90	50.02	12.01	42.04	16.67
25.44         26.86         52.88         49.16         31.41         35.93         11.47         29.26           12.59         7.97         33.37         55.97         77.89         25.30         27.83         36.45           14.95         42.36         45.89         30.56         48.33         11.49         72.98         8.30         14.3           12.14         34.36         45.89         30.56         48.33         11.49         72.98         89.14           46.64         44.17         43.48         49.08         37.78         41.03         39.11         31.16	46	18.76	14.90	49.64	55.15	40.66	69.50	99.01	79.30	60.69
12.59         7.97         33.37         55.97         77.89         25.30         27.93         36.45           14.36         42.73         83.67         91.15         36.05         24.12         8.30         14.3           12.14         34.36         45.89         30.56         48.33         11.49         72.98         89.14           46.64         44.17         43.48         49.08         37.78         41.03         39.11         31.16	47	25.44	26.86	52.88	49.16	31.41	35.93	11.47	29.26	62.60
14.95     42.73     83.67     91.15     36.05     24.12     8.30     1.43       12.14     34.36     45.89     30.56     48.33     11.49     72.88     89.14       46.64     44.17     43.48     49.08     37.78     41.03     39.11     31.16	48	12.59	7.97	33.37	55.97	77.89	25.30	27.93	36.45	20.84
46.64 44.17 43.48 49.08 37.78 41.03 39.11 31.16	60	14.95	42.73	83.67	91.15	36.05	24.12	8.30	1.43	9.83
40.04 44.17 43.46 49.08 37.78 41.03 39.11 31.16	200	* 14	34.36	45.89	30.26	48.33	1149	72.98	89.14	72.80
	Mean/silde	40.04	-	4	×	2/ /X	7			

### Appendix No. 13: Certificate of analysis

Rhodia

RHODIA OPERATIONS 40 RUE DE LA RAIE COQ 93306 AUBERVILLIERS CEDEX FRANCE Manufacturing Plant RHODIA OPERATIONS RUE PROSPER MONNET 69192 SAINT FONS FRANCE 33 472 73 6000

Deta
15.05.2007
Purchase order Itam/Data
Delivery Itam/Data
Order Itam/Data
Customer
Truck number/Seel number

Material Our/Your reference 11459 CATECROL PLAKES BIG BAG 1000 KG / PDS 220 FP CAT - 09/2000

This product complies with FMC requirements. \* Compliance guaranteed, skip testing.

Batch FPC0619301 /menufacturing date 15.07.2006/Re-Teet date 14.07.2008

Characteristic	· Unit	Value	Limit Lower	· Limit upper
Colour of scotic sold solution	HAZEN	486	•	1650
COLOUR DESTRICT	%	99,7	98,5	•
TGA Melting Point .	*c	104,7	103,7	
TAR Phenoi	%	< 0,0100	•	0,1500
#FEC Hydroquinone * .	<b>%</b> ·	< 0,0000	•	
IPIC Dityeroxy 2,5 benzoquinone	%	0,1300	•	0,3000
ICPLC  Benzeic acid	%	< 0,0180	•	0,4000
IPEC Free Addity in NaOH 0.1N/100g *	ml	8,4	•	50,0
POTENTIONATEY				

batch released on :17.07.2006 / BERMADETTE LABELLLE, Laboratory Manager / +33 472 736 179

B LAKELLE

### Appendix No. 14: Coding slide Stomach

**STOMACH** 

Slide No BC-07-

Code BC-07-13

File No BC-07-13

Slide No. BC-07-

Code BC-07-13

File No BC-07-13

Slide No BC-07-

Code BC-07-13

File No BC-07-13

Animal No.

Animal No

224 A

J1

J1.xls

228 A

11

11 xls

217 A

Α1

A1.xls

224 B

J2

J2 xls

6527

228 B

12

12.xls

6534

217 B

A2

A2.xls

224 C

J3

J3 xls

228 C

13

13.xls

217 C

А3

A3.xls

Organ

200

100

20 mg/kg/day (x1)

Doses in mg/kg/day (x2)													
	Animal No.		6512			6514			6511			6515	
0	Slide No BC-07-	213 A	213 B	213 C	214 A	214 B	214 C	215 A	215 B	215 C	216 A	216 B	216 C
U	Code BC-07-13	Q1	Q2	Q3	01	02	О3	E1	E2	E3	G1	G2	G3
	File No BC-07-13	Q1.xls	Q2 xls	Q3 xls	O1.xls	O2 xls	O3 xls	E1 xls	E2 xls	E3.xls	G1.xis	G2 xls	G3.xls
	Animal No.		6518			6517			6520			6519	_
400	Slide No. BC-07-	220 A	220 B	220 C	221 A	221 B	221 C	222 A	222 B	222 C	223 A	223 B	223 C
400	Code BC-07-13	B1	B2	В3	K1	K2	К3	D1	D2	D3	S1	S2	S3
	File No. BC-07-13	B1.xls	B2.xls	B3 xls	K1.xls	K2.xls	K3 xls	D1.xls	D2.xls	D3.xls	S1.xls	S2.xls	S3 xls
	Animal No		6524			6521		,	6522			6525	'

225 A

C1

C1 xls

229 A

P1

P1 xls

218 A

F1

F1.xls

225 B

C2

C2.xls

6529

229 B

P2

P2 xls

6532

218 B

F2

F2 xls

225 C

C3

C3 xls

229 C

**P3** 

P3 xls

218 C

F3

F3.xls

226 A

L1

L1.xls

230 A

M1

M1 xls

219 A

N1

N1 xls

226 B

L2

L2 xls

6526

230 B

**M2** 

M2.xis

6531

N2

N2.xls

219 B 219 C

226 C

L3

L3.xls

230 C

М3

M3 xls

N3

N3.xls

227 A

R1

231 A

H1

H1.xls

227 C

R3

R3.xls

231 C

**H3** 

H3 xls

227 B

R2

R2.xls

6530

231 B

H2 xls

Coding No. 13

### Appendix No. 15: Coding slide Duodenum

Organ	DUODENUM				Codi	ing No.	14						
Doses in mg/kg/day (x2)	7												
	Animal No.		6512			6514			6511			6515	
0	Slide No. BC-07-	232 A	232 B	232 C	233 A	233 B	233 C	234 A	234 B	234 C	235 A	235 B	235 C
"	Code BC-07-14	Q1	Q2	Q3	K1	K2	K3	D1	D2	D3	01	02	О3
	File No BC-07-14	Q1.xls	Q2.xls	Q3.xls	K1.xls	K2 xls	K3.xls	D1 xls	D2 xls	D3 xls	O1.xls	O2.xls	O3.xls
	Animal No.		6518			6517			6520	·	1	6519	
400	Slide No BC-07-	239 A	239 B	239 C	240 A	240 B	240 C	241 A	241 B	241 C	242 A	242 B	242 C
1 400	Code BC-07-14	H1	H2	Н3	M1	M2	M3	S1	S2	S3	N1	N2	N3
	File No. BC-07-14	H1 xls	H2 xls	H3 xls	M1.xls	M2 xls	M3.xls	S1 xls	S2.xls	S3.xls	N1.xls	N2 xls	N3 xls
	Animal No		6524			6521			6522			6525	
200	Slide No BC-07-	243 A	243 B	243 C	244 A	244 B	244 C	245 A	245 B	245 C	246 A	246 B	246 C
200	Code BC-07-14	A1	A2	A3	P1	P2	P3	L1	L2	L3	E1	E2	E3
	File No BC-07-14	A1 xls	A2 xls	A3.xls	P1.xls	P2 xls	P3 xls	L1.xls	L2.xls	L3 xls	E1.xls	E2.xls	E3 xls
-	Animal No.		6527			6529			6526			6530	
100	Slide No. BC-07-	247 A	247 B	247 C	248 A	248 B	248 C	249 A	249 B	249 C	250 A	250 B	250 C
100	Code BC-07-14	G1	G2	G3	I1	12	13	R1	R2	R3	B1	B2	B3
	File No. BC-07-14	G1 xls	G2 xls	G3 xls	I1 xls	I2 xls	13 xls	R1 xls	R2.xls	R3 xls	B1.xls	B2 xls	B3 xls
	Animal No.		6535			6537			6538				
20 mg/kg/day (x1)	Slide No. BC-07-	236 A	236 B	236 C	237 A	237 B	237 C	238 A	238 B	238 C			
25 mg.ngrady (X1)	Code BC-07-14	J1	J2	J3	F1	F2	F3	C1	C2	СЗ			
	File No. BC-07-14	J1 xls	J2.xls	J3 xls	F1.xls	F2 xls	F3.xls	C1.xls	C2.xls	C3 xls			

### Appendix No. 16: Historical data Stomach

### HISTORICAL DATA OBTAINED IN STOMACH CELLS

(from January 2007 to March 2007)

### Harvest time: 3-6 hours after the last treatment

	Mediar	Min - Medi	an Max	
SOLVENT CONTROL	 1.46	-	4.71	
POSITIVE CONTROL MNNG 20 mg/kg	3.59	-	8.54	

<sup>\*:</sup> median calculated on 150 cells

### Appendix No. 17: Historical data Duodenum

# HISTORICAL DATA OBTAINED IN DUODENUM CELLS (from January 2007 to March 2007)

## Two treatments at 24-hour interval with a sampling time 3 to 6 hours after the second treatment

:	\$ 6 \$1.			
		Media	n Min - Me	edian Max
SOLVENT CONTROL**		0.89	-	9.78
POSITIVE CONTROL DMH (20 mg/kg)		4.79	-	16.17

<sup>\*:</sup> median calculated on 150 cells

### Appendix No. 18: Amendment No. 1 to Final Study Plan FSP-IPL 070402



Specimen to be returned dated and signed

#### AMENDMENT No. 1 TO THE STUDY PLAN FSP-IPL 070402

Study title

In vivo COMET ASSAY IN THE RAT STUDY PERFORMED ON STOMACH

and DUODENUM (two treatments, one sampling time)

Sponsor

RHODIÁ

Compound

CATECHOL

Performed by :

INSTITUT PASTEUR DE LILLE - Genetic Toxicology Laboratory -

1, rue du Professeur Calmette - BP. 245 - 59019 LILLE CEDEX

The page 3 of the Final Study Plan will be modified as follows:

The control of concentrations in treatment solutions will be performed by:

Address for shipping:

Name: Address: SGS Multilab

Technopôle du Madrillet

65 rue Ettore Bugetti

**BP 90014** 

76801 Saint Etienne du Rouvray cedex

Laboratory in charge of formulation analysis following Good Laboratory Practices

Name, address of the test site: SGS Multilab, Technopôle du Madrillet - 65 rue Ettore Bugatti - BP 90014 76801 Saint Etienne du Rouvray cedex

<u>Principal investigator</u>: Name, surname: Mr Gregory Bouillis

TEL: +33 (0) 02 35 07 91 87 FAX: +33 (0) 02 35 07 91 22 Email: Gregory Bouillis@scs.com

Test site quality assurance

Name, surname: Ms SAPETA Corinne

TEL: +33 (0) 2 35 07 91 85 FAX. +33 (0) 2 35 07 91 92

Email: corinne.sapeta@scs.com

Test site manager

Name, surname: Mr Yvon GERVAISE

TEL: +33 (0)2 35 07 91 80

FAX: +33 (0)2 35 07 91 25

Email: won.gervaise@sgs.com

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All information concerning the procedures followed for analytical analysis, including analytical method, will be described in a Principal Investigator Phase Plan provided by **SGS Multilab**, validated by the study director, and included in a further amendment to the Study plan.

For Institut Pasteur de Lille Date: 30/08/01

Date: 30/08/27

Date: \$9(08707

Professor D. MARZIN Test facility management

M. WATZINGER Study director

Quality Assurance Unit

**RHODIA** 

Date: 08/09/2007

Dr Arielle GARD Sponsor representative

## Appendix No. 19: Amendment No. 2 to Final Study Plan FSP-IPL 070402





### AMENDMENT No. 2 TO THE STUDY PLAN FSP-IPL 070402

Study title

In vivo COMET ASSAY IN THE RAT STUDY PERFORMED ON STOMACH

and DUODENUM (two treatments, one sampling time)

Sponsor

RHODIA

Compound

CATECHOL

Performed by :

INSTITUT PASTEUR DE LILLE - Genetic Toxicology Laboratory -

1, rue du Professeur Calmette - BP. 245 - 59019 LILLE CEDEX

The dose of the positive control for the duodenum, dimethylhydrazine, was increased from 10 mg/kg to

The Sponsor Representative Dr. Arielle GARD is replaced by Mr. Cyrille Bocquillod.

Date: 20(8(08

Professor D. MARZIN

Test facility management

Dr. M. WATZINGER Study director

B. GOREZ

Quality Assurance Unit

For RHODIA Date: 03/01/08

Bocquillou Sponsor representative

### Appendix No. 20: Amendment No. 3 to the Final Study Plan FSP-IPL 070402





### AMENDMENT No. 3 TO THE STUDY PLAN FSP-IPL 070402

Study title : In vivo COMET ASSAY IN THE RAT STUDY PERFORMED ON STOMACH and

DUODENUM (two treatments, one sampling time)

Sponsor : RHODIA

Compound : CATECHOL

Performed by : INSTITUT PASTEUR DE LILLE - Genetic Toxicology Laboratory -

1, rue du Professeur Calmette - BP. 245 - 59019 LILLE CEDEX

### Rationale:

The following text describes SGS Analytical Phase Plan ref n° BPL07-0029, relative to the determination of the concentration of Catechol in treatment formulations used in the *in vivo* comet assay in the rat.



### **SATELLITE STUDY DESIGN**

IDENTIFICATION NUMBER: BPL07-0029 PAGE REVISION

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### STUDY PHASE TITLE

#### GLP STUDY OF AQUEOUS SOLUTIONS CONTAINING CATECHOL

Data requirement Internal method for catechol quantification by HPLC/UV (Assay Report RN07-12248)
ASTM D4052-96 (MO-0225)

Principal Investigator Grégory BOUILLIS

Satellite Study Design completed on December 05, 2007

Test facility

INSTITUT PASTEUR DE LILLE 1, Rue du Professeur Calmette – BP 65, Rue Ettore Bugatti - BP 90014 245 59019 LILLE Cedex

FRANCE Test facility's reference

(Study number) FSP-IPL070402 / CATECHOL / RHODIA

<u>Test site</u> SGS Multilab, Laboratory of 76801 SAINT ETIENNE DU ROUVRAY Cedex FRANCE

SGS Multileb reference

BPL07-0029

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### SATELLITE STUDY DESIGN

IDENTIFICATION NUMBER : BPL 07-0029

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### **APPROVAL FORM**

### SGS MULTILAB, LABORATORY OF ROUEN

	V18A 150	DATE
Test Site Quality Assurance	Contine SAPETA	December 05, 2007
Test Site Management	Yvon GERVAISE	December 05, 2007
Principal Investigator SGS Multilab, Laboratory of Rouen	Gregory Boutton	December 05, 2007

STUDY DIRECTOR:

Name Ms WATZINGER Malene

Company : INSTITUT PASTEUR DE LILLE

: 1, rue du Professeur Calmette BP 245 59019 Lille Cedex

Date :

N.B.: This sheet has to be sent back filled out to begin the study phase

SGS			QUALITY FORM
General C	rganisation Form	Date : December 05, 200	N° IM-0029 L-2
Q1	P Studies	Date of application: 06/07/2007	Pege : 3/28
TUDY DESCRIPTION	DETERMINATIO	ON OF CATECHOL CONTENT BY	HPLC/UV
N° OF STUDY	BPL07-0029		
	MS MALENE V		
QUOTATION (AND DATE OF APP		EVISION 1 DATED NOVEMBER 2	2, 2007 AND APPROVED
	DECEMBER 04	, 2007	
		Staff:	
UP/ UA: SPECIFIC DETECT	FION BY HPLC (ORGO1)		HECKS (GLP) : CORINNE SAPETA,
		AURÉLIE RENARD AND P	
PRINCIPAL INVESTIGATOR SUBSTITUTE: AUDE DE S		TECHNICAL STAFF :   HERPIN AND GREGORY	DOROTHÉE LAPERDRIX, LOIG BOUILLIS
VODO MIQUE . MODE DE C		est items	
	· · · · · · · · · · · · · · · · · · ·	OUS SOLUTIONS	
	Field of application (	matrix and range of co	ntent)
		AINING CATECHOL FROM 5 TO	
<u> </u>		est system	
	WILL BE DOCUMENTED	IN THE FINAL SATELLITE REPO	रा
	Refere	nce documents	
METHOD OR NORM : ASTM	1°10 DATED ON JUNE 22, 2007 14052-96 (MO-0225) 07-12248 (OPERATING PROCE)	DURE AND DESCRIPTION OF VALIDA	TION OF CATECHOL QUANTIFICATION)
PREVISIONAL DATE OF BEGIN		PREVISIONAL DATE OF ENDI	NG: WEEK 52
Planning of GLP checks:	according to the check list for	study verification (IM-0027)	
Validation for GLP study:	: Elno :	II yes: Dunder GLP quantification method of catech	∰ outside GLP
SAR RINGA MINI LAUGUSTICS		idation plan	V. V
(to complete if the validation is not under	tion is under GLP : This validations	n will also be detailed in the study pla	on without the initial form (61-0948) Id not the chart below), as specified in the
Test	Metrix	Number of tests	Expected specifications
PRINCIPAL INVESTIGATOR:	224220112011112	DIRECTOR OF INSTALLATION (GL	BLYMON GERVAIRE LL



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### SATELLITE STUDY **DESIGN**

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1. CONTEXT OF THE STUDY

- Test fecility:

INSTITUT PASTEUR DE LILLE 1, Rue du Professeur Calmette BP 245

59019 LILLE Cedex

FRANCE

- Study Director

Ms WATZINGER Malene

- Principal Investigator :

Mr Grégory BOUILLIS e-mail : gregory.bouillis@sgs.com Tel.: +33 2 35 07 91 87

Fax: +33 2 35 07 91 22

Chemical Formulations Customers Projects Manager

- Principal Investigator

substitute :

Ms Aude DE SLOOVERE e-mail: aude.de sloovere@sgs.com Tel: +33 2 35 07 91 73

Fax: +33 2 35 07 91 63

Organic Chemistry Production Unit Manager

- Test site :

SGS Multilab, Laboratoire de Rouen

65, Rue Ettore Bugatti - BP 90014
F-76801 SAINT ETIENNE DU ROUVRAY Cedex

France

Tel.: +33 2 35 07 91 91

-Teet site manager :

Mr Yvon GERVAISE Tel.: +33 2 35 07 91 80

-Test site manager :

substitute

Mr Patrick BLANFUNE

-Test site Quality assurance :

Ms Corinne SAPETA

e-mail ; corinne.sapeta@sgs.com Ms Aurélie RENARD

e-mail : aurelie.renard@egs.com Mr Franck SERCKER e-mail: franck.bercker@sqs.com

- Quotation :

DR07-2709 Revision 1 dated November 22, 2007 and approved by the Sponeor on December 04, 2007.

- Organisation of

the study phase :

Cf. Sheet IM-0029 deted on December 05, 2007



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- Abilities of the laboratory for the study phase :

   G.L.P. by the G.I.P.C. according to the
  Directive 88/320 EEC :
  - o Physico-chemical testing
  - o Environmental toxicity studies on aquatic and terrestrial organisms
  - o Studies on, behaviour in water, soil and air ; bioaccumulation
  - o Residues studies
  - Analytical and clinical chemistry

Into practice of the French decree \$8-1312
dated 31<sup>st</sup> December 1998
A copy of GLP acknowledgment will be supplied in addendum to the final report.

• Laboratory accredited COFRAC under n° 1-0281

- Laboratory investigations :

All tests bound in this programme will be carried out by SGS Multilab, Laboratory of Rouen.

#### 2. STUDY CONTENTS

The aim of this study is the analysis of catechol in treatment solutions used in the in vivo comet assay performed on stomach and duodenum, in compliance with the principles of Good Laboratory Practices (GLP) according to the French decree (98-1312) and the application of the OECD principles of GLP to the organisation and management of multi-site studies (consensus document of the working Group on GLP, n°13). The density determination (MO-0225) will be sie o carried out on catechel solutions prepared by SGS Multilab to express the analysis of catechol with a fitted unit.

These analyses will relate to the determination of:

Catechol content according to quantification method by HPLC/UV validated during the study referenced RN07-12248 (not under GLP scope).

Analyses will be done on test items referenced BPL07-0029.001, BPL07-0029.002, BPL07-0029.003, BPL07-0029.004, BPL07-0029.005, BPL07-0029.006, BPL07-0029.007 and BPL07-0029.008.

#### 3. TIME SCHEDULE

Satellite study design schedule (Indicative, if this study design is approved by the study director on week 50).

Study phase initiation	leave of the satellite study design
Start of the experimental determination	Week 51
End of the experimental determination	Week 51
leave of the Final satellite Report (Draft) to approval	Week 52



### SATELLITE STUDY DESIGN

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#### 4. MEANS OF COMMUNICATION WITH THE STUDY DIRECTOR

The Principal Investigator will communicate with the Study Director by phone or/and E-mail (Cf. chapter 1).

The Principal Investigator will send to the Study Director raw results of this study phase (Excel file) in a timely manner.

These results will be included in the final satellite report after Study Director's approbation.

#### S. TEST ITEMS

identification:

AQUEOUS SOLUTIONS CONTAINING CATECHOL received on October 30, 2007.

Origin:

INSTITUT PASTEUR DE LILLE (IPL) (1, Rue du Professeur Caimette – BP 245 – 59019 LILLE Cedex – FRANCE).

Amount required for the study phase: Minimum 1 mt. per test item.

#### Test items identification:

IPL's references	Amount (g)	SGS Multilab	Description
FSP-IPL 070402 J1 Distilled water	2.685 (1)	BPL07-0029.001	Solvent (distilled water)
FSP-IPL 070402 J1 10 mg/mL	2.700 (1)	BPL07-0029.002	Catechol aqueous solution (10 mg/mL)
FSP-IPL 070402 J1 20 mg/ml.	2.700 (1)	BPL07-0029.003	Catechol aqueous solution (20 mg/ml.)
FSP-IPL 070402 J1 40 mg/mL	2.697 (1)	BPL07-0029.004	Catachol aqueous solution (40 mg/mL)
FSP-IPL 070402 J2 Distilled water	2.648 (1)	BPL07-0029.006	Solvent (distilled water)
FSP-IPL 070402 J2 10 mg/mL	2.715 (1)	BPL07-0029 006	Catachel aqueous solution (10 mg/ml.)
FSP-IPL 070402 J2 20 mg/mL	2.726 (1)	BPL07-0029.007	Catechol aqueous solution (20 mg/ml.)
FSP-IPL 070402 J2 40 mg/mL	2.744 (1)	BPL07-0029.008	Catechol aqueous solution (40 mg/mL)
Batch FPC0619301	139.9 (2)	BPL07-0029.009	Catechel flakes

<sup>(1)</sup> Gross weight weighed by \$G\$ Multilab at reception.
(2) Gross weight weighed by \$G\$ Multilab on December 05, 2007

Safety data sheet of catechol was sent by the sponsor and is supplied in appendix of this satellite study design



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#### Storage:

During the study: Storage in a freezer at -16°C, in the dark (the temperature will be followed each working day with fM-0137).

After the study: See 12.2. Information on archival storage for test items.

<u>identification, manipulation, circulation</u>: In accordance with the sponsor's safety data sheet for this product.

#### 6. REFERENCE ITEMS

Name	Catechol	
Chemical Name (CA) CAS number: Provider Batch: Purity: Date of certificate: Expiration date: Appearance: Storage conditions: Safety instructions:	1,2-Benzenediol 120-80-9 FLUKA 1325632 99.99 % February 07, 2007 January 01, 2009 Fine crystals and flakes In a refrigerator at 4°C and under argon Do not take in, do not inhale and avoid skin and eye contact.	

The reference item will be used for external quantification. A copy of the reference item certificate is supplied in appendix of this satellite study design.

MilliQ water (purified water for HPLC) will be used to check the oscillating densimeter used for density determination.

### 7. REAGENTS (OR EQUIVALENT)

MilliQ water (purified water for HPLC). Acetonitrile. Phosphoric acid.

Identity and origin of reagents used will be exactly documented in the final satellite report.



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### 8. EQUIPMENTS (OR EQUIVALENT)

- MilliQ water purificator
- Usual laboratory glassware
- Ultrasonic bath
- High performance liquid chromatograph equipped with a UV diode array detector
- Column Hypersil GOLD C18, 150 x 4.6 mm (3 µm) and guard column with equivalent phase HV-0.45 µm Millex filter (PVDF)
- · 20°C water bath
- Precision scale (0.01 mg)
- 1000 µL pipettor
- Refrigerator and freezer
- Oscillating densimeter

identity of equipments used for this study phase will be documented in the final satellite report.

#### 9. DATA RECORDING

The computer applications programs used to acquire and derive data for this study phase included Word, Excel and Empower Software.

Excel sheets used for this study phase are verified with a data set and cells are locked with a password by the quality assurance unit.

Software Empower supplied by Waters Corporation has been validated (certificate of software validation, product n° 667000437EN). Once more, every year, a standard operating precedure is carried out by SGS Multilab Rouen, to check software results.

#### 10. AMENDMENTS/ DEVIATIONS (MODIFICATION FORMS)

Each modification from the satellite study design, from the Final Study Plan IPL and from SGS Multilab standard operating procedures' (SOP) will be documented, signed and dated by the Principal Investigator and reported to the Study Director in a timely menner. The Study Director will assess the impact of this modification on the quality and integrity of

the study, and eventually elaborate an amendment. A summary of the modification(s) will be included in the satellite final report.

The amendment, prepared by the Study Director, will be signed and dated by the Principal Investigator, the Test Site Management, the Study Director and the Sponsor Representative.



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#### 11. PROCEDURES

#### 11.1. Operating procedure: Catechol quantification by HPLC/UV

#### 11.1.1. Preparation of test items

Il be realised by weighing about exactly 0.4 g of test item in a 50 mL volumetric feats, adding about 45 mL of MilliQ water, placing in the 20°C water bath for temperature equilibrating, adjusting to the mark with MilliQ water, filtrating with a Millex filter and injecting in the chromatographic system, using external standardisation for quentification. Above procedure will be led 2 times for each test item to analyse (Test items BPL07-0029.002, BPL07-0029.003, BPL07-0029.004, BPL07-0029.005, BPL07-0029.007 and BPL07-0029 008).

#### 11 1.2. Preparation of reference items

Catechel content in test items will be calculated from chromatographic peak area using a calibration curve with 5 reference item solutions prepared as followed:

- Weighing about exactly (with a precision of 0.01 mg) 50 mg of reference item twice in two 50 mL independent volumetric flasis. Dissolving the reference item in about 45 mL MilliQ water by placing it in an ultrasonic bath. Adjusting to the mark after equilibrating at 20°C in the water bath.
- Dituting 2 times (by pipetting 10 mL in a 20 mL volumetric flask), 10 times (by pipetting 5 mL in a 50 mL volumetric flask) and 50 times (by pipetting 2 mL in a 100 mL volumetric flask) one of these standard stock solutions
- Diluting 4 times (by pipetting 5 mL in a 20 mL volumetric flask) and 20 times (by pipetting 5 mL in a 100 mL volumetric flask) the other one.
- All above dilutions will be realised using MilliQ water at 20°C in the 20°C water bath and then be injected in the chromatographic system.

#### 11.1.3. Preparation of elutant

- Elutant solutions will be prepared as followed:

  Water at 0.1% of phosphoric acid 85%: pipetting 1 mL (using 1000 µL pipettor) of phosphoric acid 85% in a 1000 mL volumetric flack and adjusting to the mark with MillQ water.
  - Acetonitrile at 0.1% of phosphoric acid 85%: pipetting 1 mL (using 1000 µL pipettor) of phosphoric acid 85% in a 1000 mL volumetric flask and adjusting to the mark with

### 11.1.4 Chromatographic conditions

All reference item and test items solutions will be injected in high performance liquid chromatography (HPLC) coupled with LIV diode array detector according to following conditions

- Flow rate: 1 mL/min
- Wavelength: 276 nm
- Column: Hypersil GOLD C18, 250 x 4.6 mm (3 µm) and guard column with equivalent phase
- Temperature: 30°C
- injection volume : 20 µL Retention time : About 10 minutes



### SATELLITE STUDY DESIGN

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· Elutant :

Time (min)	Acetonitrile at 0.1% of phosphoric acid (%)	Water at 0.1% of phosphoric acid (%)
0.0	5	95
15.0	5	95
15.1	90	10
18.0	90	10
18.1	5	95
25.0	5	96

The "sample list" will be begin with some reference item solutions injected several times, a solvent blank (MilliQ water), and the test item solutions injected twice, intercalating reference item regularly. At last, the "sample list" will end with some reference item solutions again.

Distilled water of day 1 (test item with reference BPL07-0029.001) will be injected as it is before injections of solutions of day 1 (test items with reference BPL07-0029.002, BPL07-0029.003 and BPL07-0029.004).

Distilled water of day 2 (test item with reference BPL07-0029.005) will be injected as it is before injections of solutions of day 2 (test items with reference BPL07-0029.006, BPL07-0029.006 0029.007 and BPL07-0029 008).

### 11.1.5. Expression of results

Content of catechol in test items will be calculated with following formula:

$$[X]_{j} = \frac{\text{(Mean area test item}_{j} - \text{Intercept}\,) \times V \times \text{purity} \times 10}{\text{Slope} \times m_{j}} \times \text{Density}$$

#### where:

 $T_{\rm e}$  catechol content in test item solution preparation n°j, expressed in g/L. Mean area test item j = mean peak area (for 2 injections) of the test item preparation n°j. Intercept = Intercept of the calibration curve obtained with reference item solutions. V = final volume in L of the test item solution.

purity = purity of the reference item (%) Slope = Slope of the calibration curve obtained with reference item solutions. m = weight of test item for preparation n°j in g.
Density = Density at 20°C of catechel solution with similar concentration (g/ml.).

No result will be given for test items BPL07-0029.001 and BPL07-0029.005 because they are delonised water and will only be used to prove the absence of catechot in matrix blanks.

For test items BPL07-0029.002, BPL07-0029.003, BPL07-0029.004, BPL07-0029.006, BPL07-0029.007 and BPL07-0029.006, results will be given as the mean of 2 independent

preparations.
All results will be rounded off to the second decimal.



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In order to express results in gf., density is required and must be determined.

Density at 20°C will be determined with an oscillating densimeter, according ASTM D4052-96 (MO-0225).

As the amount of test item is not enough to allow the measurement of density, it has been decided to prepare catechol aqueous solutions of similar concentrations and use the density of these solutions for the calculation of test items catechel concentration.

Catechol used for these preparations will be the one used for the validation of the method (see report RN07-12248), provided by RHODIA on August 30, 2007 and referenced for this study phase BPL07-0029.009.

A copy of this test item certificate is supplied in appendix of this satellite study design (document provided by RHODIA).

11.2.1. Principle of density determination
The principle is to introduce the solution in an oscillating sampling tube whose oscillation frequency modification due to the variation of tube mass is used, in association with calibration data, to determine the sample density.

### 11.2.2. Preparation of catechol aqueous solutions

3 catechol aqueous solutions will be prepared as followed.

- Weighing about exactly (with a precision of 0.01 mg) 500 mg of catechol flakes in a 50 mL volumetric flesk (solution at about 10 mg/mL). Dissolving the catechol in about 45 mL distilled water by placing it in an ultrasonic bath. Adjusting to the mark after equilibrating at 20°C in the water bath.
- arrer equisionang at 20°C in the water path.

  Weighing about exactly (with a precision of 0.01 mg) 500 mg of extechel flakes in a 25 mL volumetric flask (solution at about 20 mg/mL). Dissolving the catechel in about 20 mL distilled water by placing it in an utrasonic beth. Adjusting to the mark after equilibrating at 20°C in the water beth.

  Weighing about exactly (with a precision of 0.01 mg) 1000 mg of catechel flakes in a 25 mL volumetric flask (solution at about 40 mg/mL). Dissolving the catechel in about 20 mL distilled water by placing it in an utrasonic beth. Adjusting to the mark efter acculibration at 20°C in the water bethe.
- after equilibrating at 20°C in the water bath.

### 11.2.3 Expression of deneity determination

The result is given by the measurement oscillant densimeter and is rounded off to the third

The final result is expressed as the mean of two independent tests

### 11.3. Catechol stability study

In order to ensure that there is no molecule degradation by freezing or in time, a determination of catechel content will be done on a catechel solution made for method validation (see report RN07-12248).

This aqueous solution of catechel at about 10 g/L has been made in the laboratory on October 05, 2007, using test item BPL07-0029.009. It has been used for precision study and 25 measures of catechel content have been realised on 3 different days (on October 05, 24 and 30, 2007). This solution has been kept in a freezer at less than -18°C.



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To prove the stability of catechol, a determination of catechol content in this solution will be realised at the same time than the determination of catechol content in test items. Preparations will be realised as described in chapter 11.3, and content will be calculate as described in chapter 11.1.5.

Solution of catechol will be considered as stable if the result does not differ than more than 5% from the mean of 25 previous measures (5% is the value provided by the FAO for storage procedure of pesticide formulations).

#### 11.4. Quality procedure

The laboratory applied general and specific procedures described in the quality system in compliance with GLP requirements.

#### 12. FINAL SATELLITE REPORT

The Final Satellite Report will be issued according to GLP regulations and will at least

- include the following items:

   complete general information (e.g. title, addresses, responsibilities and time schedule) as provided in this satellite study design,
  - complete information about the reference item as provided in this satellite study
  - signature of the Test site management and Principal Investigator
  - a statement of compliance with Good Laboratory Practice (GLP) signed by the Principal Investigator,

  - Principal investigator,

    a copy of the Test site's GLP certificate,

    a statement from the quality assurance unit signed by the Quality Assurance representative including inspection dates,
    information on archiving of material and documents,

    exact description of method and materials used in the course of this study

  - a summary of the relevant results,
  - if necessary, a discussion of the results and of circumstances which might have influenced the quality and integrity of this study phase,
  - the results tebulated.

The Study Director will receive the Draft final satellite report checked by the Quality Assurance Unit (QAU) for revision prior to release of the final satellite report and will, if necessary, add corrections.

After having given his written approval, the Study Director will receive one unbound original + 1 pdf file of the final satelike report.



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#### 13. QUALITY PROGRAMME

Inspections are in accordance with Chapter II - 2 of the Quality Programme. They will be carried out by a person in charge of checks and according to the verification plan (Cf quality printed form fM-0027 "Check list of study verifications").

The study plan, subsequent amendments and the satellite study design will be inspected.

Results of these verifications will be included in a report (IM-0031 "Study report of verification").

During the study phase, periodic in-study audits will be driven according to the verification plan (Cf. quality printed form IM-0027 "Check list of study verifications"). Raw data will be audited.

When the study phase will be finished, a final satellite report will be edited and examined according to the check list final report (IM-0032).

All these verifications will be presented in the final satellite report to establish a statement on quality clarifying the inspections dates and the number of reports.

NB: the test site quality assurance unit will inform the principal investigator of each verification with the report (IM-0031). This will be signed by the principal investigator and the installation director of SGS Multilab Rouen, even if it is mentioned the term "Study Director".

Copies of the inspection reports will be sent to the Study Director in a timely manner.

### 14. INFORMATION ON ARCHIVAL STORAGE

#### 14.1. Documents

Documents referring to the G.L.P. study and study phase (copy of study plan and subsequent amendments, satellite study design, final satellite report, modification forms, raw data, check list) will be stored in a box by study in a locked cupboard in the basement

or our Laboratory.

The study phase will be archived after the totality of the study phase will be finished off for the Study Director and after his approbation.

After ten years, with the approbation of the Sponsor, all documents referring to the study phase will be destroyed or returned to the Sponsor.

Access: described in the GLP quality plan n°1.

Archivist: quality manager.

Documents referring to the staff are conserved in a locked cupboard in the effice of the Documents referring to the starr are conserved in a rocket cupcount in the entree of the laboratory and during all the company existence.

Documents referring to other information are stored in the basement of our laboratory or in the analytical room for 10 years.

Documents referring to this study will be available for consultation by the Study Director at

SGS Multilab Rouen.



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#### 14.2. Materials

Reference items:

One specimen of each reference item will be stored for a period of time specified by analysis certificates.

Test items:

All samples of test items will be disposed of after the finalisation of the study phase (date of approbation of final satellite report). The Study Director will be informed with the form referenced MOD-0002.

Remaining samples of test items will be disposed of after analysis.

## 14.3. Distribution of the satellits study design

✓ Study Director
✓ QAU of \$G\$ Multileb Rouen
✓ A.U. Specific Detection by HPLC (SG\$ Multileb Rouen)

1 original unbounded 1 original 1 copy

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### 15. APPENDICES

APPENDIX 1: COPY OF CATECHOL MATERIAL SAFETY DATA SHEET (FRENCH VERSION) (1)
APPENDIX 2: COPY OF TEST ITEM SPL07-0029.009 (CATECHOL FLAKES) CERTIFICATE (FRENCH
VERSION)
APPENDIX 3 : COPY OF REFERENCE ITEM (CATECHOL) CERTIFICATE

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APPENDIX 1: COPY OF CATECHOL MATERIAL SAFETY DATA SHEET (FRENCH VERSION) (1)



CATECHOL.		Page 1/16
Date: 36/1.1/0806	Version; 7.04	Antical confusion various \$100
I Identification du produi	t et de la société	
HOM & PRODUCT	: CATECHOL	
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7 disphere	: 334372488	
Titleopis	20 4 37 24 96 99	
APPEL BURGENCE	: 04.79.73 00 00 SPPLA : 01.46.42.	** **
2 Composition / informat	lens sur les composant	•
2 Composition / informati >> SINGERANCE New objections Symmetries	eme sur les composant  : PYROCATECHOL >=  : Dâydeup-1,2 benzèn Orine daylemplienté Pyrocatitables	100.6 %.
>> SUBSTANCE New diginique count	: PYROCATECHOL >= : Ditydoxy-1,2 benefit Ortho dityding/benefit Pyroselfishino. : 100-00-8.	96.6 %. A.
>> SUBSTANCE Num shimique sissel Symmysses	: PYROCATECHOL >= : Ditydoxy-1,2 benefit Ortho dityding/benefit Pyroselfishino. : 100-00-8.	98.6 %. R. Mt.
SO SUBSTANCE New definions street Symmetries CAS	: PYROCATECHOL :- Dhydeup-1,2 bensin- Ortho-dhydrejhande Pyroudfishin- 1 190-95. HYSROQUINGNE (C) HY CR: 284-917-8 - C	96.6 %. A.
20 SUBSTANCE Neue diplosique ident Ryemepines CAS Represente prefessatent six designer	: PYROCATECHOL >- : Dilydesay-1,2 bareain Ortho dilydesay-1,2 bareain Pyrocation : 50-00-0. HY050-0. N° CE: 284-417-8 - C	98.6 %. MAD: 123-37-69;
20 SUBSTANCE New objection intent flymented CAS Supercolo princement in design  3 Intentification das dungs PROCENIN DANCERS	PYROCATECHOL P     Dilydesup-1,5 bareain Orth dilydesup-1,5 bareain Orth dilydesup-1,6 bareain Pyrosalidesup-1,6 bareain 1 100-00-8.     HYDROQUINGHIS (0 N° CB: 284-417-8 - 6 30, 68     Nocil jiet byckess, in Muhammed (riteria)	BBLS 15.  In the case of the c
New objective detect Symmetric CAS Sequence proceduration design  3 Identification des d'angl PROCEPAUX DAMORES Sittes obtante our la recid	PYROCATECHOL P     Dilydesup-1,5 bareain Orth dilydesup-1,5 bareain Orth dilydesup-1,6 bareain Pyrosalidesup-1,6 bareain 1 100-00-8.     HYDROQUINGHIS (0 N° CB: 284-417-8 - 6 30, 68     Nocil jiet byckess, in Muhammed (riteria)	BBLS %.  Alt. 125-31-4):
20 SUBSTANCE New objection intent flymented CAS Supercolo princement in design  3 Intentification das dungs PROCENIN DANCERS	PYROCATECHOL P     Dilydesup-1,5 bareain Orth dilydesup-1,5 bareain Orth dilydesup-1,6 bareain Pyrosalidesup-1,6 bareain 1 100-00-8.     HYDROQUINGHIS (0 N° CB: 284-417-8 - 6 30, 68     Nocil jiet byckess, in Muhammed (riteria)	BBLS 15.  In the case of the c
20- SUBSTANCE Nyu dipinjusi stuni Ryumpusa  CAS Ryumeda prisonantisis dangar  3 Identification dan dangar  PROCEPALIX DAMARES Silke software on it smoot  Dengas physiques at chimiques	PYROCATECHOL :=     Dhydeary-1,5 beneath dryte dhydraghands     Pyrocatilishine.     S0-65-8.     HYDROCATILISHINE of HYDROCATILISHINE OF HYDROCATILISHINE OF HYDROCATILISHINE OF HYDROCATILISHINE OF HYDROCATILISHINE OF HYDROCATILISHINE OF HYDROCATILISHINE OF HYDROCATILISHINE OF HYDROCATILISHINE OF HYDROCATILISHINE OF HYDROCATILISHINE OF HYDROCATILISHINE OF HYDROCATILISHINE OF HYD	BBLS 15.  In the case of the c

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APPENDIX 1: COPY OF CATECHOL MATERIAL SAFETY DATA SHEET (FRENCH VERSION) (2)



### FICHE DE DONNEES DE SECURITE

CATECHOL		Pegs 2 de 10
Date: 28/11/2006	Vezsion: 7.44	Azimele et remplace version: 6.00
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Inkalation	: Socialization le sujet éventuellement un	de l'exposition. Mottre bu repos, Consulter reddecin. Montret authi Tohe sy médecin. [*]
Contact even in posts	abondization of a	ou phaneure coditée. Lever immédialement la maritire prolongée (15 ins au moine). En (cougilir, instation,), consulter un médecis. au médecis. [*]
Contact even les yeux	: Pingage & Teau go paupidrae blin Bo; mèdeoin en sas d' anddeoin. [7]	uranie issusidiet et prolongië en meinterent le Platie (15 mindiet sie molne ). Gonaalter un hylpsien persigtante, Montrer delle fiche su
Ingestion	Consulter éventue médealn. (*)	de feire yearly. No rien donner à boire. Reiners un médeciri, Montrer cette fishe su
Autres informations	: Phicupital in 1986 décentaritation u appropriée pour tr	nuents soulités dans un sac âténche paur Bériages, Utiliser toé depaissements de protecti liter une personne contentinée. 27
5 Mesures de lutte contre	l'incendie	
Moyens d'extinction - Assetseriés	· Sau nakalisista()(a	igide de carbone (CO2)Mousee
		Man de authono (o a -d
		à proximità, utilicar les agents d'extinction
· Déconsultés	En cas d'incendia adaptés. : Lors de la sembus	NancOégagement de gez textiques.
	En che d'incendie adaptée.  Lore de la sembre L'Utiliser les stayers avoidents. Réstar du 606 d'o Evident le labels	Non:Oégapiersoni de gez totriques. L'adéquists pour surphetire les insendes



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APPENDIX 1: COPY OF CATECHOL MATERIAL SAFETY DATA SHEET (FRENCH VERSION) (3)



### FICHE DE DONNEES DE SECURITE

CATECEOL			Page 3 de 10
Dece: 23/11/2006		Vertice: 7.04	Annale et remplace version: 6.00
6 Mesures en cas de disp	ersio	a accidentalle	
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Précautions pour la protention de l'environnement	:	No poe labour la produi	t na ybpánická dami fleristrucktor ant. nandaga ferifüllt dangaraus pour
ylddadas da aettrydgs Rdeupdados	-	Récupèrer le produit au Remissier relocaliquere Recipillir le produit den compressione le supplier de compressione le produit réc	mipologon, sof le populat. y un filoliphent de secoure: tid. supère pour délivination ultérieure.
Helioyagefelcontemination	:	Laver gree de l'est sod Puis lever à grande des	66 (2 it 5 %).
Wiminetion .	:	Pour l'élimitation des m § 12 Considération re	allibres my pieridya politica, se reserter m



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APPENDIX 1: COPY OF CATECHOL MATERIAL SAFETY DATA SHEET (FRENCH VERSION) (4)



Duc. 18/1/2006  Version: 7,08  Annote a remplica version  This migraturation et stockinge  MANUPLATION  Completium des pessentiese (Ampirelleis).  Prévairent à prevaire  This is de strong de soule found.  Stiffer le sequent even fair.  Stiffer le sequent even fair.  Stiffer le sequent even fair.  Stiffer le sequent deven fair.  Stiffer le sequent dispert des le president de pessentières deven faire le pessentières.  Respecte les senditions des pessentières de la restifer le sequent devier devier le sequent devier le sequent devier le sequent devier le sequent devier le sequent devier le sequent devier le sequent devier le sequent devier le sequent devier le sequent deven le sequent deven le sequent deven deven le sequent deven le sequent le sequent deven le sequent le sequent deven le sequent le sequent deven le sequent le sequent le sequent le sequent deven le sequent le	ps 4 de 10	Page 4			ATECEOL
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- Contraction d'univalence  - Pour parier  - Pour parier  - Pour parier  - Pour parier  - Pour parier  - Pour parier  - Contro-toffquin  - Contro-		NO.	Alcohi of produits passed		tetjäris intompatibles
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APPENDIX 1: COPY OF CATECHOL MATERIAL SAFETY DATA SHEET (FRENCH VERSION) (5)



### FICHE DE DONNEES DE SECURITE

CATECHOL			<b>Page 5 du 16</b>
Date: 38/11/2006		Version: 1,84	Amula et remplace vertien: 6.00
- Valours Rosites (Funda)	1	INTERCOLLEGE VALLE	& (5 ppin). 2 mphus.
- Values (III.A./A.C.G.LR.)	:	Continhet TLV (TWA): 2 Pour Hydroguianne: TLV (	30-right) (Eppin). (TMA): 2 rights.
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- Protestien respiratoire		Bri one de Manuton de va Apparell de projektion resi	gratiire autoniime lesiani.
- Protestián des maies	:	Gants de protection en PV Mardyldsiden de proteil fan Ganto de protection langs,	
- Protestion des yeux	٠.	Lunettes de séculté + des	un facial.
- Presectión de la poeu et du corps	,	Villements de pretaiden. Est east de risque de projec va pours: Canadataciers en MYPALO	cilon de liquido ou de libération de N pui à défaut en PVC.
Mayans addisolfb d'argenes		avise semplement distinctes	
Manus d'hygites	1	De juiter let milles après à lie PAR beine, platiger ou Ciparrer les voternants de	pule menipulation. fémér ejf bi flévi de berrell. femelt des rétorments de 1864.

### 9 Propriétés physiques et châmiques

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- Fórase	;	Coulies.
- Contour		beige./.brun.
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APPENDIX 1: COPY OF CATECHOL MATERIAL SAFETY DATA SHRET (FRENCH VERSION) (8)



PICHE	DE	TV	DNMEES	DE.	SECTI	TTT
	-		PATE LEADING	u		u i e

CATECHOL			Page 6 de 10
Dets: 28/11/2004		Version: 7.84	Arisolo (Expensione version: 6.60
Landau State of the Land State	7	(Vapoure).	
- Infiliating	:	1.97 % (Hikima).	
Presion de tapme	1	THE A SHOOL	
Dennité de yegeur (zir = 1)	;	\$.A.	
Detailed relative (coss = E)	:	1.371 # 30°C. (Odtarnious språs Kolon)	Son effectuée sur la produit maidillé
Matec voluțiilopie apparante Solubilită	:	8.8 - 0.6 toplem3 (Produit n	nàn tasaé).
- dans l'usu	:	202 pl 5 25 °C. 400 pl 6 00 °C.	
- clana has isolventa deguniliques		Findisment soluble dens: -addensition of a 50 °C; -aleast (Statelle), 322 of a Aspec soluble dense - uldersiteren, 19 of a 20 °C Post soluble dense - tidadhinus de carbone.	Ç.
Coefficient de pintings n-Ostanolième	;	6.86 (log POE)	
10 Statifité et réactivité			
Sepilita Råntings ålagurauses	:	Shelds & Spropérature emb	ianio.
- hindhus á dirhar	ŧ	- anydpints.	
- Produke de décomposition desgireux	:	Per combustion ou par de thère: due veperent terriques. (Phines).(Deprise de carbo	composition thermique (pyrclyse), one - CCI + CCI2).

#### l linforinations textologiques

Toxiski siye

Ct. 6 Appendigs, it is: 2-9 mpd. (Parl) (?) (Dominion bibliographiques). April per printing (parlo in provision). April per printing (parlo in provision). April 1990 (parlo in parlo i

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APPENDIX 1: COPY OF CATECHOL MATERIAL SAFETY DATA SHEET (FRENCH VERSION) (7)



### FICHE DE DONNEES DE SECURITE

CATECHOL			Page,7 de 1
Deux 23/11/\$096		Versiee: 7.64	Annals et symplece vitalen: 6.00
Effets leanus			
	:		applicativa estando situz la topin,
		Societations infinit per	populacioni esculptre alsea le Impir.
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- Mungfahra	:	Des rémittels contradict étudés Dés résilitées és (Derméss bibliographiques	otes ent dis electros dans differentes idifficiónt en accirs d'Éviduation [7] (46).
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12 Informations écologique			
	_		
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<b>ECOTOXICITE</b>			
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APPENDIX 1: COPY OF CATECHOL MATERIAL SAFETY DATA SHEET (FRENCH VERSION) (8)



# CATECHOL Page 2 de 10 Dens: 28/11/3006 nio et ramphon vanion: 6.66 13 Constilérations rointives à l'élimination RESIDUE DU PRODURT Destruction Minheston MARALLAGES SOUTLINS REMARQUE 14 Informations relatives au transport

FICHE DE DONNEES DE SECURITE

### REGLEMENTATIONS INTERNATIONALIS

Veiss Investion - Railfronce (RJD/ADR)

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SATELLITE STUDY DESIGN

Page 9 de 10

IDENTIFICATION NUMBER: 8PL07-0029

CATECHOL

REVISION: 0

PAGE:25/28

APPENDIX 1: COPY OF CATECHOL MATERIAL SAFETY DATA SHEET (FRENCH VERSION) (9)



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SATELLITE STUDY DESIGN

IDENTIFICATION NUMBER: BPL07-0029

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APPENDIX 1: COPY OF CATECHOL MATERIAL SAFETY DATA SHEET (FRENCH VERSION) (16)



### FICHE DE DONNEES DE SECURITE

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SATELLITE STUDY DESIGN

IDENTIFICATION NUMBER : BPL07-0029

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APPENDIX 2: COPY OF TEST ITEM BPL67-0029.009 (CATECHOL FLAKES) CERTIFICATE (FRENCH VERSION)



RNODIA OPERATIONS 40 RUE DE JA MAIE COQ 93306 AUBERVILLIERS CEDEX FRANCE using de fabrication BHODIA OPERATIONS RIM PROSEER MOMENT 69192 SAIRT FORS FRANCE 33 472 73 6000

Certificat d'analyse

23.06.2007 Patts de entenende/Date

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...

If imphidolation(f) plants

Article: note / voire désignation 11459 CATROROL FLAKES BIG BAG 1000 KG /

Cet article a été produit conformément aux exigences FMC. \* Conformité garantie, résultat en fréquence.

Lot FPC0619301 /date de fabrication 15.07.2006/date de ré-analyse 15.07.2008

Caractéristique	Unité	Valour	Limite Inférieure	Limite supérfeure
Cotoration solucid solit.5 %	HAZEN	486	•	1650
COLORINGTES				
Titre	*	99,7	96,5	•
ACD	•			
Point de Fueien	*¢	104,7	103,7	-
ACD				
Phénoi	<b>%</b>	< 6,0100	•	0,1500
CLAIP		7		
Hydroquindne *	*	< 0,0 <b>00</b> 0		
CLEP				
D.H.B.Q	%	0,1300	-	0,3060
CLMP		- 14 - 170-1		
Acide benzojque	*	< 0,0180	-	0,4000
CT.ACP	_			
Apiellal Birth MetOH 0.194/190g *	mi	8,4	-	9,08

lot libéré le :17.07.2006 ; Bernadatte LABELLIE, Responsable Laboratoire ; +33 472 736 179



SATELLITE STUDY DESIGN

IDENTIFICATION NUMBER - BPL07-0029

REVISION . 0

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APPENDIX 3: COPY OF REFERENCE ITEM (CATECHOL) CERTIFICATE

SIGMA-ALDRICH

Cortificate: Analysis

reduct Num

Pyrotetethol, puries., grystallized, 199.5% (HPLC)

Product Number Printed Brand CAS Number

Plots 120-80-9 C<sub>6</sub>H<sub>4</sub>-1,2-(OH)<sub>2</sub> 110.11

Meiesular Permula Meiesular Walght

LOT 1226022 RAWATE PRINC CATSTALS AND PLAKES 99.39 % rel 105 C? COLONESS

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DATE OF RECOMMENDED RETEST

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Dr. Gert von Lauk, Manager Quality Control

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For institut Pasteur de Lille Date: 09 101

Ε

Date: 02 (05 \08

Date: 0409(08

Professor D. MARZIN
Test facility management

Dr. M. WATZINGER Study director B. GOREZ

Quality Assurance Unit

For RHODIA Date: 1/05/08

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### Appendix No. 21: Amendment No. 4 to the final study plan FSP-IPL 070402



Specimen to be returned dated and signed

### AMENDMENT No. 4 TO THE STUDY PLAN FSP-IPL 070402

In vivo COMET ASSAY IN THE RAT STUDY PERFORMED ON STOMACH Study title

and DUODENUM (two treatments, one sampling time)

Sponsor

RHODIA

Compound

CATECHOL

Performed by

INSTITUT PASTEUR DE LILLE - Genetic Toxicology Laboratory -

1, rue du Professeur Calmette - BP. 245 - 59019 LILLE CEDEX

Dr Fabrice NESSLANY replaces the Study Director Dr Malene WATZINGER and Dr Sophie SIMAR replaces the Deputy Study Director Dr Fabrice NESSLANY. These modifications applied to all the parts of the study plan and the analytical satellite study design where the name of the Study Director and the Deputy Study Director are mentioned.

For Institut Pasteur de Lille

0110108

Date: 10 10 2008

Date: 10/10/08

Fr. Daniel MARZIN

Test facility management

Dr. Fabrice NESSLANY Study director

Ms. Brigitte GOREZ Quality Assurance Unit

RHODIA

RHOUSA
Date: 10/45/3608 (15.06.2.08)

### Appendix No. 22: Control of concentration in dosing formulations



# FINAL SATELLITE REPORT

IDENTIFICATION NUMBER : BLP 07-0029

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### **STUDY PHASE TITLE**

### GLP STUDY OF AQUEOUS SOLUTIONS CONTAINING CATECHOL

Data requirement Internal method for catechol quantification by HPLC/UV (Assay Report RN07-12248) ASTM D4052-96 (MO-0225)

> Principal Investigator Grégory BOUILLIS

Study completed on January 14, 2008

**Test facility** 

**INSTITUT PASTEUR DE LILLE** 1, Rue du Professeur Calmette - BP 245 59019 LILLE Cedex FRANCE

Test facility's study number FSP-IPL070402 / CATECHOL / **RHODIA** 

Test site SG8 Multilab, Laboratory of Rouen 65, Rue Ettore Bugatti - BP 90014 76801 SAINT ETIENNE DU **ROUVRAY Cedex FRANCE** SGS Multilab reference

**BPL 07-0029** 



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# **APPROVAL FORM**

### SGS MULTILAB, LABORATORY OF ROUEN

	VISA	DATE
Test Site Quality Assurance	Corinne SAPETA	January 14, 2008
Test site Management	Yvon GERVAISE W	January 14, 2008
Principal Investigator SGS Multilab, Laboratory of Rouen	Grégory BOUILLIS	January 14, 2008

STUDY DIRECTOR:

Name: Ms WATZINGER Malene

Company : INSTITUT PASTEUR DE LILLE

Adress : 1, rue du Professeur Calmette BP 245

59019 Lille Cedex

Date

Visa

1

N.B. :This sheet must be completed.



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# **GOOD LABORATORY PRACTICE COMPLIANCE** STATEMENT

The reported study phase was performed at the laboratory SGS Multilab - Rouen in accordance with the valid procedures at the laboratory.

1, the undersigned, Grégory BOUILLIS, Principal investigator, certify that the study phase mentioned above was conducted in compliance with the principles of Good Laboratory Practices (GLP) as defined in the French Decree n°98-1312 dated on 31st December 1998.

The validity date of our GLP diploma expired on May 29<sup>th</sup>, 2007. We have asked to the French authorities in order to have a continuation until the audit date programmed without any Visa: break of our GLP acknowledgement.

Date: January 14, 2008



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### **QUALITY ASSURANCE STATEMENT**

I, the undersigned, Corinne SAPETA, person in charge of the quality assurance unit, certify that the study phase mentioned above was verified in accordance with the French Decree n° 98-1312 dated 31<sup>st</sup> December 1998.

The final phase report was audited according to the appropriate standard operating procedure and provides an accurate record of the results obtained.

Date of inspection	Type of inspections	Date reported to Test site management and Principal Investigator
November 16, 2007	Satellite Study design (draft 1)	RV n°1, November 16, 2007
December 05, 2007	Satellite Study design (draft 2)	RV n°2, December 05, 2007
December 05, 2007	Satellite Study design rev 0	RV n°3, December 05, 2007
December 17, 2007	Study, installation and process	RV n°4, December 17, 2007
December 19, 2007	Study and process	RV n°5, December 19, 2007
December 27, 2007	Satellite Final report (Draft 1)	RV n°6, December 27, 2007
January 09, 2008	Satellite Final report (Draft 2)	RV n°7, January 09, 2008
January 14, 2008	Satellite Final report rev 0	RV n°8, January 14, 2008

Dates of reporting to the Study Director (IPL): November 16, 2007, December 05, 2007, December 06, 2007, December 19, 2007, December 20, 2007, December 27, 2007, January 09, 2008 and January 14, 2008.

Person in charge of quality assurance unit Date: January 14, 2008 Vica: To.



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#### **ABSTRACT AND INTRODUCTION**

The aim of this study was the determination of catechol content in treatment solutions used in vivo comet assay performed on atomach and duodenum, in compliance with the principles of Good Laboratory Practice (GLP) according to the French decree (98-1312) and the application of OECD principles of GLP to the organisation and management of multisites studies (consensus document of the working Group on GLP, n°13). These analyses were done by carrying out the HPLC/UV quantification method validated during the study RN07-12248 (not under GLP scope).

The test items were sent by INSTITUT PASTEUR DE LILLE (1, rue du Professeur Calmette, BP 245, 59019 Lille cedex, FRANCE) and received at the laboratory on October 30, 2007. They were identified by SGS Multilab Rouen BPL07-0029.001, BPL07-0029.002, BPL07-0029.003, BPL07-0029.004, BPL07-0029.005, BPL07-0029.006, BPL07-0029.007 and BPL07-0029.008.

Catechol content has been determined by weighing about exactly 0.4 g of test item in a 50 mL volumetric flask, adding about 45 mL of MilliQ water, placing in the 20°C water bath for temperature equilibrating, adjusting to the mark with MilliQ water, filtrating with a Millex filter and injecting in the chromatographic system, using external standardisation for quantification.

Above procedure was led 2 times for each test item to analyse.

#### Results are described below:

Sponsor's test item reference FSP-IPL 070402	SGS Multilab test item reference	Catechol content (mg/mL)	Difference (%)
Distilled water J1	BPL07-0029.001	No chromatographic peak detected	-
10 mg/mL J1	BPL07-0029.002	9.77	-2.3
20 mg/mL J1	BPL07-0029.003	19.4	-3.0
40 mg/mL J1	BPL07-0029.004	40.5	+1.3
Distilled water J2	BPL07-0029.005	No chromatographic peak detected	•
10 mg/mL J2	BPL07-0029.006	9.75	-2.5
20 mg/mL J2	BPL07-0029.007	19.0	-5.0
40 mg/mL J2	BPL07-0029.008	40.2	+0.5

A satisfactory agreement was observed between the actual and nominal concentrations of catechol in treatment solutions used in the in vivo comet assay performed on stomach and duodenum. Indeed, the deviations from nominal concentrations were within an acceptable range of ±10%.

Furthermore, solutions of catechol can be considered as stable because the results obtained for a solution of catechol at 10 mg/mi. prepared on October 05, 2007 do not differ from more than 5% from the mean of 25 previous measures determined for precision study (cf. report RN07-12248).



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Names and positions of investigators who participated in the major parts of this study phase.

### **Analysts**

Dorothée LAPERDRIX : Chemist, A.U. specific detection HPLC ORG 01.

**Principal Investigator** 

Grégory BOUILLIS, Chemical Formulations Customers Projects Manager.

Substitute

Aude DE SLOOVERE, Organic Chemistry Production Unit Manager.

Original:

x 1 Study Director

x 1 GLP archive SGS Multilab Rouen



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1. CONTEXT OF THE STUDY

- Test facility:

INSTITUT PASTEUR DE LILLE 1, Rue du Professeur Calmette

T, Rue du Profes BP 245

59019 LILLE Cedex

FRANCE

- Study Director

Ms WATZINGER Malene

- Principal Investigator:

Mr Grégory BOUILLIS

e-mail: gregory.bouillis@sgs.com

Tel.: +33 2 35 07 91 87 Fax: +33 2 35 07 91 22

Chemical Formulations Customers Projects Manager

- Principal investigator

substitute :

Ms Aude DE SLOOVERE

e-mail : aude.de sloovere@sgs.com

Tel.: +33 2 35 07 91 73 Fax: +33 2 35 07 91 63

Organic Chemistry Production Unit Manager

- Test site :

SGS Multilab, Laboratoire de Rouen 65, Rue Ettore Bugatti - BP 90014

F-76801 SAINT ETIENNE DU ROUVRAY Cedex

France

Tel.: +33 2 35 07 91 91

- Test Site management:

Mr Yvon GERVAISE Tel.: +33 2 35 07 91 80

- Test site Quality assurance :

Mrs Corinne SAPETA

e-mail: corinne.sapeta@sgs.com

- Estimate :

DR07-2709 Revision 1 dated November 22, 2007 and

approved by the Sponsor on December 04, 2007.

- Organisation of

the study phase :

Cf. Sheet IM-0029 dated on December 05, 2007



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### - Abilities of the laboratory for the study phase :

G.L.P. by the G.I.P.C. according to the Directive 88/320 EEC:

- o Physico-chemical testing
- Environmental toxicity studies on aquatic and terrestrial organisms
- Studies on, behaviour in water, soil and air; bioaccumulation
- o Residues studies
- o Analytical and clinical chemistry

Into practice of the French decree 98-1312 dated 31st december 1998

A copy of GLP acknowledgment is supplied in addendum to the final report.

Laboratory accredited COFRAC under n° 1-0281

### - Laboratory investigations :

All tests bound in this program were carried out by SGS Multilab, Laboratory of Rouen.
Tests were realised in accordance with the study plan BPL 07-0029 rev 0 dated on December 05, 2007.

#### 2. STUDY CONTENTS

The aim of this study was the analysis of catechol in treatment solutions used in the in vivo comet assay performed on stomach and duodenum, in compliance with the principles of Good Laboratory Practices (GLP) according to the French decree (98-1312) and the application of the OECD principles of GLP to the organisation and management of multisite studies (consensus document of the working Group on GLP, n°13). The density determination (MO-0225) has also been carried out on catechol solutions prepared by \$GS Multilab (BPL07-0029.009) to express the content of catechol with a fitted unit.

These analyses related to the determination of:

 Catechol content according to quantification method by HPLC/UV validated during the study referenced RN07-12248 (not under GLP scope).

Analyses were done on test items referenced BPL07-0029.001, BPL07-0029.002, BPL07-0029.003, BPL07-0029.004, BPL07-0029.005, BPL07-0029.006, BPL07-0029.007 and BPL07-0029.008.

A catechol stability study was carried out on a test item solution referenced RN 07-12248.



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### 3. TIME SCHEDULE

Satellite study was carried out according to the following time schedule.

Study phase initiation

Satellite Study Design approval date

(study director)

Start of the experimental determination End of the experimental determination

Experimental determination approval

date (study director)

Amendment Issue of the Final satellite Report (Draft1)

to approval

Issue of the Final satellite Report (Draft2)

to approval

Issue of the Final satellite Report

December 05, 2007

December 06, 2007

December 17, 2007

December 18, 2007

December 20, 2007 (e-mail)

None

December 27, 2007

January 09, 2008

January 14, 2008

### 4. MEANS OF COMMUNICATION WITH THE STUDY DIRECTOR

The Principal Investigator has communicated with the Study Director by phone or/and E-mail.

The Principal Investigator has sent to the Study Director raw results of this study phase (Excel file) in a timely manner.

These results were included in this final satellite report after Study Director's approbation.

### 5. TEST ITEM

Identification:

AQUEOUS SOLUTIONS CONTAINING CATECHOL received on

October 30, 2007.

Origin:

INSTITUT PASTEUR DE LILLE (IPL) (1, rue du Professeur Calmette

- BP 245 - 59019 LILLE Cedex - FRANCE)

Amount required for the study phase:

Minimum 1 mL per test item.



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#### Test items identification:

IPL's references	Amount (g)	8G8 Multilab references	Description
FSP-IPL 070402 J1 Distilled water	2.685 (1)	BPL07-0029.001	Solvent (distilled water)
FSP-IPL 070402 J1 10 mg/mL	2.700 (1)	BPL07-0029.002	Catechol aqueous solution (10 mg/mL)
FSP-IPL 070402 J1 <b>20 mg/m</b> L	2.700 (1)	BPL07-0029.003	Catechol aqueous solution (20 mg/mL)
FSP-IPL 070402 J1 40 mg/mL	2.697 (1)	BPL07-0029.004	Catechol aqueous solution (40 mg/mL)
FSP-IPL 070402 J2 Distilled water	2.648 (1)	BPL07-0029.005	Solvent (distilled water)
FSP-IPL 070402 J2 10 mg/mL	2.715 (1)	BPL07-0029.006	Catechol aqueous solution (10 mg/mL)
FSP-IPL 070402 J2 20 mg/mL	2.726 (1)	BPL07-0029.007	Catechol aqueous solution (20 mg/mL)
FSP-IPL 070402 J2 40 mg/mL	2.744 (1)	BPL07-0029.008	Catechol aqueous solution (40 mg/mL)
Batch FPC0619301	139.9 (2)	BPL07-0029.009	Catechol flakes

(1) Gross weight weighed by SGS Multilab at reception.

Safety data sheet of catechol has been sent by the sponsor and is supplied in appendix of this satellite study design.

Storage:

During the study: Storage in a freezer at less than -18°C, in the dark (the temperature has been followed each working day with IM-0137).

After the study. See 12.2. Information on archival storage for test items.

 $\underline{\text{Identification, manipulation, circulation}}: In \ \text{accordance with the sponsor's safety data sheet}$  for this product.

<sup>(2)</sup> Gross weight weighed by SGS Multilab on December 05, 2007.



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#### 6. REFERENCE ITEMS

Name

Catechol

Chemical Name (CA):

1,2-Benzenediol

CAS number Provider 120-80-9 FLUKA

Batch: Purity:

1325632 99.99 %

Date of certificate:

February 07, 2007

Expiration date:
Appearance:

January 01, 2009

Appearance:
Storage conditions:

Fine crystals and flakes

Safety instructions:

In a refrigerator at 4°C and under argon

Do not take in, do not inhale and avoid skin and eye

contact
The reference item was used for external quantification.

A copy of the reference item certificate is supplied in appendix of this final satellite report. MilliQ water (purified water for HPLC) was used to check the oscillating densimeter used for density determination.

### 7. REAGENTS (or equivalents)

Reagents	Supplier	Purity	Reference	Batch No.
MilliQ Water	HPLC quality water is produced in the laboratory			ooratory
Acetonitrile	SDS	-	00637G21	D710071071
Phosphoric acid	PROLABO	85.8 %	20624.295	07D260505

### 8. EQUIPMENT (or equivalents)

Equipment	Labo No.	Technical file
MilliQ water system	4114	DT-0046
Ultrasonic bath	3444	•
Ultrasonic bath	3445	•
High performance liquid chromatograph 2695 (WATERS) with diode array detector 2996	8GS M0179+ SGS M0180+ SGS M0181	DT-0444
Thermostated water bath	4529	DT-0240
Precision scale	4522	DT-0184
1000 µL pipettor	107	•
5000 µL pipettor	86	•
Reference item storage refrigerator	4112	DT-0018
Test item storage refrigerator	B1104	DT-0244
Test item storage freezer	3632	DT-0324
Oscillating densimeter	3492	DT-0266



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HPLC column used for this study is Hypersil GOLD C18 (Thermo reference: 25003-154630), 4.6 x 150 mm (3  $\mu$ m), and guard column with equivalent phase as followed:

Labo No.	Serial Number
C07-16	0375201E

#### Other equipment used are:

Equipment	Reference	Batch
Usual laboratory glassware	-	_
HV-0.45µm Millex filters (PVDF)	SLHV033NK	R7EN46536
Empower chromatographic software	Version 5.00	•
Excel software	Version 2003	-

The laboratory does not resort to any outside equipment to carry out tests. N.B.; DT means technical file.

#### 9. DATA RECORDING

The computer applications programs used to acquire and derive data for this study phase included Word, Excel and Empower Software.

Excel sheets used for this study phase were verified with a data set and cells were locked with a password by the quality assurance unit.

Software Empower supplied by Waters Corporation has been validated (certificate of software validation, product n° 687000437EN). Once more, every year, a standard operating procedure is carried out by SGS Multilab Rouen, to check software results.

#### 10. AMENDMENTS/ DEVIATIONS (Modification forms)

No modification from the satellite study design, and from SGS Multilab standard operating procedures' (SOP) were done.

The amendment n°1 (control of concentrations in treatment solutions performed by SGS Multilab) from the Final Study Plan IPL was signed and dated by the Principal Investigator.

### 11. PROCEDURES

#### 11.1. Operating procedure: density determination

In order to express results in g/L, density was required and had to be determined. Density at 20°C was determined with an oscillating densimeter, according to ASTM D4052-96 (MO-0225).

As the amount of test item was not enough to allow the measurement of density, it has been decided to prepare catechol aqueous solutions of similar concentrations and use the density of these solutions for the calculation of test items catechol concentration.



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Catechol used for these preparations was the one used for the validation of the method (see report RN07-12248), provided by RHODIA on August 30, 2007 and referenced for this study phase BPL07-0029,009.

A copy of this test item certificate is supplied in appendix of this final satellite report (certificate provided by RHODIA).

#### 11.1.1. Principle of density determination

The principle is to introduce the solution in an oscillating sampling tube whose oscillation frequency modification due to the variation of tube mass is used, in association with calibration data, to determine the sample density.

### 11.1.2. Preparation of catechol aqueous solutions

3 catechol aqueous solutions have been prepared as followed:

- Weighing about exactly (with a precision of 0.01 mg) 500 mg of catechol flakes in a 50 mL volumetric flask (solution at about 10 mg/mL). Dissolving the catechol in about 45 mL distilled water by placing it in an ultrasonic bath. Adjusting to the mark after equilibrating at 20°C in the water bath.
- Weighing about exactly (with a precision of 0.01 mg) 500 mg of catechol flakes in a 25 mL volumetric flask (solution at about 20 mg/mL). Dissolving the catechol in about 20 mL distilled water by placing it in an ultrasonic bath. Adjusting to the mark after equilibrating at 20°C in the water bath.
- Weighing about exactly (with a precision of 0.01 mg) 1000 mg of catechol flakes in a 25 mL volumetric flask (solution at about 40 mg/mL). Dissolving the catechol in about 20 mL distilled water by placing it in an ultrasonic bath. Adjusting to the mark after equilibrating at 20°C in the water bath.

#### 11.1.3. Expression of density determination

The result is given by the oscillant densimeter measurement and is rounded off to the third decimal.

The final result is expressed as the mean of two independent tests.

### 11.2. Operating procedure: Catechol quantification by HPLC/UV

### 11.2.1. Preparation of test items

Tests were realised by weighing about exactly 0.4 g of test item in a 50 mL volumetric flask, adding about 45 mL of MilliQ water, placing in the 20°C water bath for temperature equilibrating, adjusting to the mark with MilliQ water, filtrating with a Millex filter and injecting in the chromatographic system, using external standardisation for quantification. Above procedure has been led 2 times for each test item to analyze (Test items BPL07-0029.002, BPL07-0029.003, BPL07-0029.004, BPL07-0029.006, BPL07-0029.007 and BPL07-0029.008).

Test items BPL07-0029.001 and BPL07-0029.005 are solvent blanks (distilled water) and have been injected as they are to check the absence of any catechol chromatographic peak in solvent blanks.



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#### 11.2.2. Preparation of reference items

Catechol contents in test items were calculated from chromatographic peak area using a calibration curve with 5 reference item solutions prepared as followed:

- Weighing about exactly (with a precision of 0.01 mg) 50 mg of reference item twice in two 50 mL independent volumetric flasks. Dissolving the reference item in about 45 mL MilliQ water by placing it in an ultrasonic bath. Adjusting to the mark after equilibrating at 20°C in the water bath.
- Diluting 2 times (by pipetting 10 mL in a 20 mL volumetric flask), 10 times (by pipetting 5 mL in a 50 mL volumetric flask) and 50 times (by pipetting 2 mL in a 100 mL volumetric flask) one of these standard stock solutions.
- Diluting 4 times (by pipetting 5 mL in a 20 mL volumetric flask) and 20 times (by pipetting 5 mL in a 100 mL volumetric flask) the other one.
- All above dilutions have been realised using MilliQ water at 20°C in the 20°C water bath and then been injected in the chromatographic system.

#### 11.2.3. Preparation of elutant

Elutant solutions were prepared as followed:

- Water at 0.1% of phosphoric acid 85%: pipetting 2 mL (using 5000 µL pipettor) of phosphoric acid 85% in a 2000 mL volumetric flask and adjusting to the mark with MilliQ water.
- Acetonitrile at 0.1% of phosphoric acid 85%; pipetting 1 mL (using 1000 µL pipettor) of phosphoric acid 85% in a 1000 mL volumetric flask and adjusting to the mark with acetonitrile.

#### 11.2.4. Chromatographic conditions

All reference item and test items solutions have been injected in high performance liquid chromatography (HPLC) coupled with UV diode array detector according to following conditions:

Flow rate : 1 mL/minWavelength : 276 nm

• Column : Hypersil GOLD C18, 250 x 4.6 mm (3 μm) and guard column with

equivalent phase
• Temperature : 30°C
• Injection volume : 20 μL

Retention time: About 9.6 minutes

• Elutant :

Time (min)	Acetonitrile at 0.1% of phosphoric acid (%)	Water at 0.1% of phosphoric acid (%)
0.0	5	95
15.0	5	95
15.1	90	10
18.0	90	10
18.1	5	95
25.0	5	95

The "sample list" began with some reference item solutions injected several times, a solvent blank (MilliQ water), and the test item solutions injected twice, intercalating reference item regularly. At last, the "sample list" ended with some reference item solutions again.



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Distilled water of day 1 (test item with reference BPL07-0029.001) was injected as it is before injections of solutions of day 1 (test items with reference BPL07-0029.002, BPL07-0029.003 and BPL07-0029.004).

Distilled water of day 2 (test item with reference BPL07-0029.005) was injected as it is before injections of solutions of day 2 (test items with reference BPL07-0029.006, BPL07-0029.007 and BPL07-0029.008).

#### 11.2.5. Expression of results

Contents of catechol in test items were calculated with following formula:

$$[X]_{i} = \frac{\text{(Mean area test item}_{j} - Intercept) \times V \times purity \times 10}{\text{Slope} \times m_{i}} \times Density$$

#### where:

[X]= catechol content in test item solution preparation n°j, expressed in g/L.
 Mean area test item j = mean peak area (for 2 injections) of the test item preparation n°j.
 Intercept = Intercept of the calibration curve obtained with reference item solutions.
 V = final volume in L of the test item solution.
 purity = purity of the reference item (%)
 Slope = Slope of the calibration curve obtained with reference item solutions.
 m j= weight of test item for preparation n°j in g.

Density = Density at 20°C of catechol solution with similar concentration (g/mL).

No result has been calculated for test items BPL07-0029.001 and BPL07-0029.005 because they are distilled water and are used only to prove the absence of catechol in matrix blanks.

For test items BPL07-0029.002, BPL07-0029.003, BPL07-0029.004, BPL07-0029.006, BPL07-0029.007 and BPL07-0029.006, results are given as the mean of 2 independent preparations.

All results are rounded off in order to have 3 significant figures.

### 11.3. Catechol stability study

In order to ensure that there is no molecule degradation by freezing or in time, a determination of catechol content has been done on a catechol solution made for method validation (see report RN07-12248).

This aqueous solution of catechol at about 10 mg/mL has been made in the laboratory on October 05, 2007, using test item BPL07-0029.009. It has been used for precision study and 25 measures of catechol content have been realised on 3 different days (on October 05, 24 and 30, 2007). This solution has been kept in a freezer at less than -18°C.

To prove the stability of catechol, a determination of catechol content in this solution has been realised at the same time than the determination of catechol content in test items. Preparations has been realised as described in chapter 11.3, and content has been calculated as described in chapter 11.2.5.



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#### 11.4. Quality procedures

The laboratory applied general and specific procedures described in the quality system in compliance with GLP requirements. Quality manual and GLP quality plan could be supplied on request.

### 12. RESULTS OF TESTS ACCORDING TO G.L.P. REQUIREMENTS

Test items were analyzed in compliance with the methods.

#### 12.1. Density determination

### Aqueous solutions at 10 mg/mL of catechol:

This solution has been prepared on December 17, 2007 by weighing 0.50326 g of test item BPL07-0029.009 (purity: 99.7%) in a 50 mL volumetric flask (final concentration of 10.035 mg/mL).

	Test n°1	Test n°2	
Date of analysis	December 17, 2007	December 17, 2007	
Density (g/mL)	1.00036	1.00037	
Mean density (g/mL)	1.000		

## Aqueous solutions at 20 mg/mL of catechol:

This solution has been prepared on December 17, 2007 by weighing 0.50106 g of test item BPL07-0029.009 (purity: 99.7%) in a 25 mL volumetric flask (final concentration of 19.982 mg/mL).

	Test n°1	Test n°2		
Date of analysis	December 17, 2007	December 17, 2007		
Density (g/mL)	1.00253	1.00256		
Mean density (g/mL)	1.003			

<u>Aqueous solutions at 40 ma/ml. of catechol</u>:
This solution has been prepared on December 17, 2007 by weighing 1.06738 g of test item BPL07-0029.009 (purity: 99.7%) in a 25 mL volumetric flask (final concentration of 42.567 mg/mL).

	Test n°1	Test n°2		
Date of analysis	December 17, 2007	December 17, 2007		
Density (g/mL)	1.00746	1.00744		
Mean density (g/mL)	1.007			



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### 12.2. Catechol quantification by HPLC/UV

Analyses were carried out on December 17, 2007.

Sponsor's teet item reference FSP-IPL 070402	SGS Multilab test item reference	Test	Sample weight (g)	Final volume (mL)	Catechol (g/kg)	Mean (g/kg)	RSD (%)	Mean (mg/mL)	Difference (%)
Distilled water J1	BPL07-0029.001		No chro	matographi	c peak detect	ed at the re	tention ti	me of extect	hoi
						‡ 1977 ‡ 1			
20 mg/mL J1 BPL0	PD 07 0000 000	n°1	0.42740	50	19.3		0.77	40.4	10
	BPL07-0029.003	n°2	0.40676	50	19.5	19.4	0.77	19.4	-3.0
Distilled water J2	BPL07-0029.005		No chro	natographi	c peak detect	ted at the re	tention ti	me of catec	hol
								1	
20 mg/mL J2 BPL07-	BB: 67 6666 667	n°1	0.40509	50	19.0	19.0	0.11	19.0	-5.0
	BPL07-0029.007	n°2	0.41433	50	18.9		0.11	10.0	-9.0
				, j 1, - 1, -					

A satisfactory agreement was observed between the actual and nominal concentrations of catechol in treatment solutions used in the in vivo comet assay performed on stomach and duodenum. Indeed, the deviations from nominal concentrations were within an acceptable range of ±10%.

### 12.3. Catechol stability study

Results obtained for a solution at 10 mg/mL of catechol, prepared in our laboratory for a precision study (cf. report RN07-12248.001), not under GLP scope:

Date of analysis	Measure (g/kg)	Mean (g/kg)	RSD (%)		
October 05, 2007	9.90		0.94		
	9.84				
	9.91	9.83			
	9.68				
	9.79				
October 05, 2007	9.96				
	9.94				
	9.89	9.89	0.59		
	9.82				
	9.85				
October 24, 2007	10.1				
	10.1		1.15		
	10.1	10.0			
	9.84				
	10.0				



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Date of analysis	Measure (g/kg)	Mean (g/kg)	RSD (%)	
October 24, 2007	10.1			
	9.89			
	9.98	9.97	0.80	
	9.89			
	9.99			
	10.1			
October 30, 2007	9.98			
	10.0	9.98 0.91	0.91	
	9.89			
	9.92			

General mean: 9.94

#### Aqueous solution at 10 g/L of catechol (RN07-12248.001):

	Date of analysis	Sample weight (g)	Final volume (mL)	Catechol (g/kg)	Mean (g/kg)	RSD (%)
Test n°1	12-17-2007	0.43146	50	9.76	9.80	0.58
Test n°2	12-17-2007	0.43560	50	9.84		
Mean of 25 precision study measures (g/kg)				9.94		
Difference (%)			-1.41	7		

Solution of catechol can be considered as stable because the result does not differ from more than 5% from the mean of 25 previous measures (5% is the value provided by the FAO for storage procedure of pesticide formulations). The solution of catechol was prepared on October 05, 2007.



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#### 13. INFORMATION ON ARCHIVAL STORAGE

#### 13.1. Documents

Documents referring to the G.L.P. study and study phase (copy of study plan and subsequent amendments, satellite study design, final satellite report, modification forms, raw data, check list) are stored in a box by study in a locked cupboard in the basement of our Laboratory.

The study phase is archived after the totality of the study phase is finished off for the Study Director and after his approbation.

After ten years, with the approbation of the Sponsor, all documents referring to the study phase are destroyed or returned to the Sponsor.

Access: described in the GLP quality plan n°1.

Archivist : quality manager.

Documents referring to the staff are conserved in a locked cupboard in the office of the laboratory and during all the company existence.

Documents referring to other information are stored in the basement of our laboratory or in the analytical room for 10 years.

Documents referring to this study phase are available for consultation by the Study Director at SGS Multilab Rouen.

#### 13.2. Material

#### Reference items:

One specimen of each reference item is stored for a period of time specified by analysis certificates.

#### Test items:

All samples of test items are disposed of after the finalisation of the study phase (date of approbation of final satellite report). The Study Director will be informed with the form referenced MOD-0002.

Remaining samples of test items were disposed of after analysis.



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#### **Appendices**

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## APPENDIX 1 : COPY OF TEST ITEM BPL07-0029.009 (CATECHOL FLAKES) CERTIFICATE (FRENCH VERSION)



RHODIA OPERATIONS 40 RUE DE LA HAIE COQ 9J306 AUBERVILLIERS CEDEX FRANCE usine de fabrication RHODIA OPERATIONS MUE PROSPER MODERT 59192 SAINT FORS FRANCE \$3 472 73 6000

#### Certificat d'analyse

Dele 23.08.2007 Posta de commanda/Del

Posts Entition/Date

Posts d'ordni/Date

Cloni

fil" immelriculation/N° plomb

Article: note / votre designation 11459 CATECHOL FLAKES BIG BAG 1000 KG /

Cet article a été produit conformément aux exigences FMC. \* Conformité garantie, résultat en fréquence.

Lot FPC0619301 /date de febrication 15.07.2006/date de ré-analyse 15.07.2008

Caractéristique	Unité	Valeur	Limite Inférieure	Limite supérieurs
Coloration sollacid ac\$1,5 %	HAZEN	486	,	1650
COLORINGTEE	ونت		×4 -	
Titre	. %	99,7	98,5	•
ACD Point de Fusion	*C	104,7	103,7	,
ACD				
Phénoi	%	< 0,0100	•	9,1500
CLUP				
Hydrogulnarie *	5,	< 0,0000		
CLAP				
D.H.S.Q	%	0,1300	•	9,3000
CLEP				
Acide benzoigue	%	< 0.0180	•	9,4000
CLMP				2,44
Acidité libre NeOti 0.1N/100g *	mi	8,4	•	50,0

lot libéré le :17.07.2005 ; Bernadette LAMEILLE, Responsable Laboratoire ; +33 472 736 179

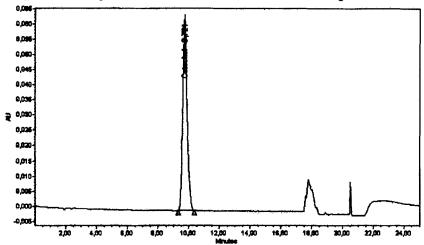


**IDENTIFICATION NUMBER: BPL 07-0029** 

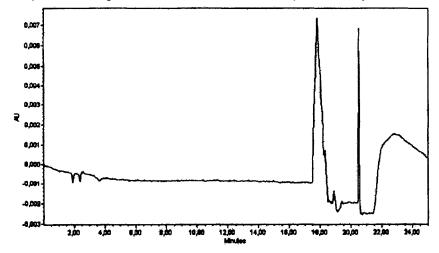
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#### APPENDIX 2: INDICATIVE CHROMATOGRAMS (1)

- Example of chromatogram of a solution of reference item at about 0.05 g/L:



- Example of chromatogram of the test item BPL07-0029.001 (Distilled water) :





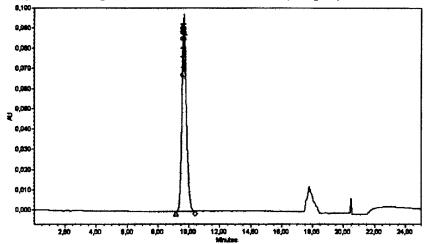
**IDENTIFICATION NUMBER: BPL 07-0029** 

REVISION: 0

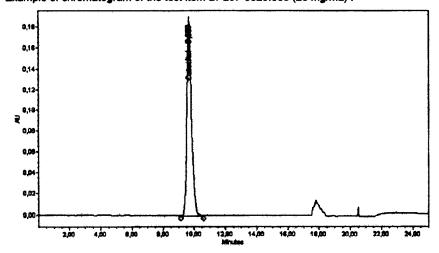
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#### APPENDIX 2: INDICATIVE CHROMATOGRAMS (2)

- Example of chromatogram of the test item BPL07-0029.002 (10 mg/mL) :



- Example of chromatogram of the test item BPL07-0029.003 (20 mg/mL) :



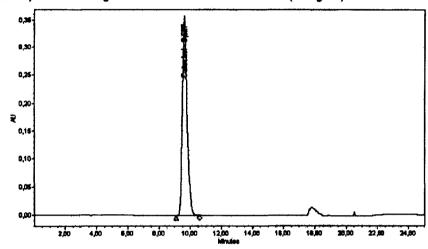


**IDENTIFICATION NUMBER: BPL 07-0029** 

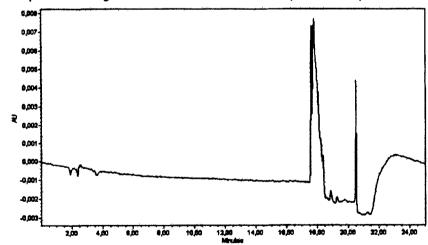
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#### APPENDIX 2: INDICATIVE CHROMATOGRAMS (3)

- Example of chromatogram of the test item BPL07-0029.004 (40 mg/mL) :



- Example of chromatogram of the test item BPL07-0029.005 (Distilled water) :





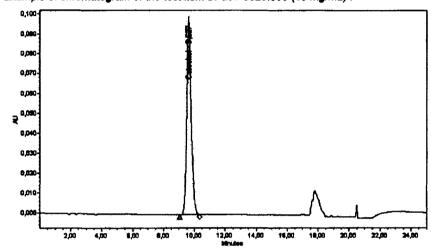
**IDENTIFICATION NUMBER: BPL 07-0029** 

REVISION: 0

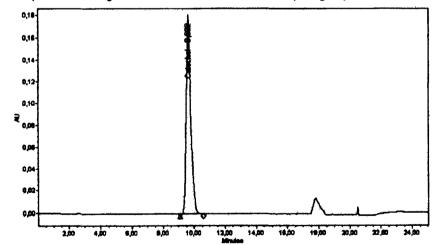
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#### APPENDIX 2: INDICATIVE CHROMATOGRAMS (4)

- Example of chromatogram of the test item BPL07-0029.006 (10 mg/mL) :



- Example of chromatogram of the test item BPL07-0029.007 (20 mg/mL) :





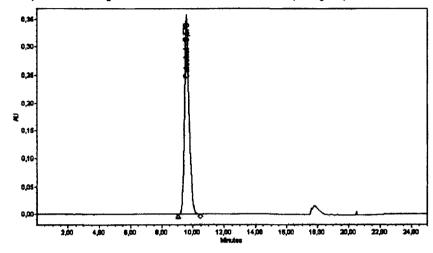
**IDENTIFICATION NUMBER: BPL 07-0029** 

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#### APPENDIX 2: INDICATIVE CHROMATOGRAMS (5)

- Example of chromatogram of the test item BPL07-0029.008 (40 mg/mL) :





# **REPORT**

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APPENDIX 3: COPY OF REFERENCE ITEM (CATECHOL) CERTIFICATE



#### Certificated Analysis

Product Name

**Product Number** 

Pyrocatechol, purks., crystallized, 199.5% (HPLC) 15980

Product Brand CAS Number

Fluida 120-80-9

Molecular Formula

CH -1,2-(OH)2

Molecular Weight

110.11

TEST

LOT 1228632 RESULTS

APPEARANCE (COLOR) APPEARANCE (FORM)

COLORLESS

PURITY (HPLC AREA %)

FINE CRYSTALS AND FLAKES 99,99 % rei

MELTING POINT SOLUBBLETY (COLOR) SOLUBBLITY (TURNIDITY)

105 C COLONLESS CLEAN (<3.5 NTU) 1 G IN 10 ML MECH

SOLUBILITY (METROD) CARBON CONTENT HYDROGEN CONTENT INFRARED SPECTRUM

65.42 % 5.52 % CORRESPONDS di/FEB/07

DATE OF QC-RELEASE DATE OF RECOMMENDED RETEST

7AN/09

Sigms Addich guarantees the 'Sales-Specification' values only, non-specified basis may be included as additional information. The current 'sales Specification' shield available on request. For further inculties, please content our Technical Service. Sigms Addich rearrants, that its products conform to the information postures in the said state Sigms-Addich publicitions. Purchaser must determine the addictibility of the product for its gestionar use. See referred side of invoice for additional terms and conditions of sale. The values given on the 'Certificate of Analysis' are the results determined at the time of analysis.

Quality Control Buchs Switzerland



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#### APPENDIX 4: COPY OF GLP CERTIFICATE DELIVERED BY GIPC



#### CROUPE INTERMINISTERIEL DES PRODUITS CHIMIQUES

Paris, le 12 DEC, 2005

OBJET : Evaluation de la conformité aux B.P.L. selon la directive 2004/10/CE du 11 février 2004.

Consécutivement à votre engagement vis à vis du GIPC et du COFRAC et en application du décret 
n° 8,-278 du 25 mers 1981 portant création d'un Groupe Interministériel des Produits Chimiques (GIPC), modifié notamment par le décret 99-206 du 7 mars 1990 et par le décret 1991-312 du 31 décembre 1998 concernant les bounes pratiques de laboratoriers, je vous confirme que le GIPC, au vu des régulates du contrôle exercé par le Comité français d'accréditation (COFRAC) - Section Laboratoires a décidé pour

Respect des principes de B.P.L.

Domaines de reconssissance :

1 + esseis physico-chimiques
4 - études dectoxicologiques sur les organismes aquatiques et terrestres

0 \$ - dindes pertunt sur le comportement dans l'eau, dans le soi et dans l'air;

blooccumulation

6 - études portant sur les résidus 8 - mèthodes de chimie analytique et clinique

Date d'inspection : 28 & 29 novembre 2005

D inspection de renouvellement (i.r)
D inspection d'extension (i.e)

Date de décision du G.I.P.C. : 9 décembre 2005 Date de prise d'affet : 29 novembre 2005 Année de première conformité : 1993 Durée de validité : 18 mois

Le Président, P.O.

o CRIVSSEL

SGS MULTILAB Technopôle du Madrillet

SGS MUL-HL-TU

T-6801 SAINT ETIENNE DU ROUVRAY CEDEX

Bocrétariat général du GIPC - DOR-Sinney - 12, see Visies - 75572 Paris codes 12

Téléphone ; 91. 33 44 96 10 - Télécopie : 91 53 44 91 72



IDENTIFICATION NUMBER : BPL07-0029 DATE: MAY 15, 2008

REVISION: 0 PAGE: 1/2

#### **MODIFICATION FORM No.1**

Justifications: The appendix of the final satellite report.

The validity date of our assessment of compliance with Good Laboratory Practices (GLP), displaid in the final report referenced above (Study director reference: FSP-IPL070402 / CATECHOL / RHODIA), expired on May 29th, 2007. Nevertheless, SGS Multilab, Laboratoire de Rouen has obtained from the French authorities the prolongation of its validity until the next audit, with retroaction since May 29th, 2007 (see below).

The French authorities (GIPC) sent us the new assessment of compliance with Good Laboratory Practices (GLP) under EC directives.

Amend the following paragraphs as indicated by the underlined words and sentences.



C 4 272. 750

DILITT: Prolongation de la déclaration de conformité aux BPL

Monsion: le Directeur,

Per dicinium du CBPC on dute du 9 témpishes 2005 vicine lestellation d'espei à dué processes combineme aux principes de BPT, pour une durée de 18 sorie à compler du 39 provembre 2015, sell, (major ma 29 anti 2007).

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Dans l'ainaite de la montination de nouveau l'abident du CiPC, sour limenaire n'a puse rémit et dans se promuses sur l'imperium efficusée.

Eta connéquentes, se sante préjugire de la désision que prendre le CHPA. lors de un prochaine plumère, le productes de 12 mois le durée de velicité de la déclaration de conformité minéralise le 12 décimente 2005.

Into Pad PERON

KES JALU. TILAE Problepiës vio Modelije BY 19044 BY 19044 PROT BALYT ETHANIKEU NOUVRAY CEDEX





IDENTIFICATION NUMBER : BPL07-0029 DATE: May 15, 2008

REVISION: 0

PAGE: 2/2



#### CROUPE INTERVINONTERIES, BUS PRODURES CHIMIODIS

- 6 MAI 2000

Objet : Restustion de la conduminé sux Bornes Profiques de Laboratoires (BPL) soles los directões. 2004/CE et 2003/16/CE da 11 Birgin: 2004.

Subject : distansement of compliance with Good Laboratory Practices (LLP) under the EC direction 20049 and 2004(5):p 11 February 2004.

Combinationment à verre impograment viçal-nés du UPU et du CNPEAC et on application du shacte n° 2004-1923 du 4 décembre 2006 contechnal foi bosseus proteçant du liberatairem et modifient la décet n° 20-278 du 36 mays 1941 per la protest prétries d'un george internativalent des problets chindques, je veux contenne que la GRFE, a une des rémites y la copietie esquée jeur la Corriet financier que la GRFE, a une des rémites y la copietie esquée jeur la Corriet financier d'un content que la GRFE, a une des rémites y de copietie esquée jeur la Corriet financier d'un content de la content de la copietie de la copietie de la copietie de la copietie de la copietie de la copietie de la copietie de la copietie de la copietie que de la copietie que de la copietie que de plantair juntificat de la copietie del la copietie de la copi

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Durie de validist: Il mole Tien of validity: Il months

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Bondurtir glodul de CEPC - DOS: Bittsp - 12. nor Villat - 15572 Peris unter \$2 Tilliplana : 17 3,1 44 56 10 1101maple de 51 44 9: 70

This modification form was made in 2 original specimens. One must be returned by the Study director.

For approval	Visa	Date
Director of Installation SGS Multilab, Laboratory of Rouen	Yvon GERVAISE	May 15, 2008
Principal Investigator of SGS Multilab, Laboratory of Rouen	Grégory BON	May 15, 2008
Test Site Quality Assurance	Corinne SAPETA	May 15, 2008

#### STUDY DIRECTOR:

Company : INSTITUT PASTEUR DE LILLE

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